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8  
9 **UNITED STATES DISTRICT COURT**  
10 **NORTHERN DISTRICT OF CALIFORNIA**  
11 **SAN FRANCISCO DIVISION**

12 **IN RE CAPACITORS ANTITRUST**  
13 **LITIGATION**

**Master File No. 14-cv-03264-JD**

**INDIRECT PURCHASER PLAINTIFFS'**  
**FIRST CONSOLIDATED COMPLAINT**

14 **THIS DOCUMENT RELATES TO:**  
15 **ALL INDIRECT PURCHASER ACTIONS**  
16

**JURY DEMAND**

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Indirect Purchaser Plaintiffs, on behalf of themselves and all others similarly situated (the “Classes” as defined below), upon personal knowledge as to the facts pertaining to them and upon information and belief as to all other matters, and based on the investigation of counsel, bring this class action for damages, injunctive relief and other relief pursuant to federal antitrust laws and state antitrust, unfair competition, and consumer protection laws. Plaintiffs demand a trial by jury, and allege as follows:

**I. NATURE OF ACTION**

1. This lawsuit is brought against defendants<sup>1</sup>, the leading manufacturers of capacitors sold in the United States, for engaging in two massive and separate conspiracies to unlawfully inflate, fix, raise, maintain or artificially stabilize the prices of electrolytic and film capacitors, respectively.<sup>2</sup> Defendants’ conspiracies successfully targeted various industries in the United States, raising prices for purchasers of electrolytic and film capacitors and consumers alike.

2. Indirect Purchaser Plaintiffs seek to represent all persons and entities in the United States who purchased (a) one or more electrolytic capacitor(s) from a capacitor distributor and/or (b) an electronic product not for resale which included one or more electrolytic capacitor(s) as component parts, which a defendant, its current or former subsidiary, or any of its co-conspirators

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<sup>1</sup> Elna Co., Ltd., Elna America Inc., Hitachi Chemical Co., Ltd., Hitachi Chemical Co. America, Hitachi AIC Inc., Ltd., Matsuo Electric Co., Ltd., NEC Tokin Corp., Nichicon Corp., Nippon Chemi-Con Corp., United Chemi-Con, Inc., Matsuo Electric Co., Ltd., NEC TOKIN Corp., NEC TOKIN America Inc., Nichicon Corp., Nichicon America Corp., Nissei Electric Co., Ltd., Nitsuko Electronics Corp., Okaya Electric Industries Co., Ltd., Panasonic Corp., Panasonic Corp. of North America, Rubycon Corp., Rubycon America Inc., SANYO Electric Co., Ltd., SANYO Electronic Device (U.S.A.) Corp., Shinyei Technology Co., Ltd., Soshin Electric Co., Ltd., Taitso Corp., and Toshin Kogyo Co., Ltd. (collectively, “defendants”).

<sup>2</sup> As Plaintiffs are in the early stages of discovery concerning the nature and scope of the electrolytic and film capacitor conspiracies, and as the Court granted the United States Department of Justice’s motion to intervene and stayed discovery until April 15, 2015 per its October 30, 2014 Civil Minutes (ECF No. 309), Plaintiffs still have substantial discovery to conduct regarding defendants’ meetings, discussions, and agreements. Plaintiffs must be able to significantly advance the inquiry into and analysis of defendants’ conspiratorial conduct before we can firmly reach conclusions regarding the nature, scope, and effects of the conspiracies. As such, while the Complaint currently alleges separate meetings and discussions regarding electrolytic and film capacitors, further discovery may reveal that there was one overarching conspiracy due to the overlapping defendants and customers or more than two conspiracies.

1 sold from January 1, 2003 through such time as the anticompetitive effects of defendants' conduct  
2 ceased ("Electrolytic Class Period").

3 3. Indirect Purchaser Plaintiffs also seek to represent all persons and entities in the  
4 United States who purchased (a) one or more film capacitor(s) from a capacitor distributor and/or  
5 (b) an electronic product not for resale which included one or more film capacitor(s) as component  
6 parts, which a defendant, its current or former subsidiary of, or any of its co-conspirators sold from  
7 January 1, 2007 through such time as the anticompetitive effects of defendants' conduct ceased  
8 ("Film Class Period").

9 4. Indirect Purchaser Plaintiffs purchased electrolytic and film capacitors as a stand-  
10 alone product or as a component part of an electronic product. When purchased as a stand-alone  
11 product, electrolytic and film capacitors are directly traceable to the specific manufacturer. When  
12 purchased as part of an electronic product, electrolytic and film capacitors are discrete and  
13 identifiable component parts that pass through the chain of distribution in substantially the same  
14 form from defendants to consumers. A capacitor is traceable to an entity owned and/or controlled  
15 by a defendant because it bears the defendant's markings (*e.g.*, name, logo, series).

16 5. Capacitors are one of the most common electronic components in the world today.  
17 They store electric charge between one or more pairs of conductors separated by an insulator.  
18 Almost all electronic products—from cellphones to personal computers to home appliances—  
19 contain them, often hundreds of them. The three basic types of capacitors are ceramic, electrolytic,  
20 and film, the latter two of which are the subject of Indirect Purchaser Plaintiffs' Consolidated  
21 Complaint ("Complaint"). Electrolytic and film capacitors are widely used in a range of industries,  
22 such as information and telecommunications, audiovisual, and electronic games.

23 6. An "electrolytic capacitor" uses an electrolyte (an ionic conducting liquid) as one of  
24 its plates to achieve a relatively larger capacitance per unit volume. As used in this Complaint,  
25 electrolytic capacitors include the following: circular polymer aluminum electrolytic capacitors,  
26 rectangular polymer aluminum capacitors, rectangular polymer tantalum capacitors, non-polymer  
27 aluminum electrolytic capacitors, and non-polymer electrolytic double-layer capacitors ("ELDC").

Manufacturers of polymer electrolytic capacitors compete on shape (*i.e.*, rectangular capacitor manufacturers compete with each other). Electrolytic capacitors can vary significantly by voltage and capacitance.

7. Applications of circular polymer aluminum electrolytic capacitors include personal computers (PCs), digital audiovisuals (AV), games, and industrial appliances. Applications of rectangular polymer aluminum electrolytic capacitors include notebook PCs, tablets, digital AVs, amusement, servers, and communications. Applications of rectangular polymer tantalum capacitors include notebook PCs, games, cellular phones, smart phones, and digital still cameras. Applications of non-polymer aluminum electrolytic capacitors include digital AV, information and communications, various power supply circuits, and inverter circuits. ELDC are best suited for the power backup needs of high reliability systems.

**Figure 1: The SANYO defendants manufacture electrolytic capacitors, including circular aluminum polymer capacitors (brand name: OS-CON) and rectangular tantalum polymer capacitors (brand name: POS-CAP).**

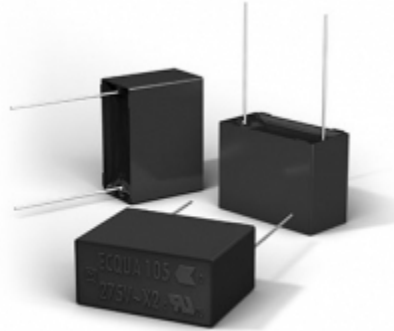


8. A “film capacitor” uses insulating plastic film and one of two conductive materials, propylene or polyester. As used in this Complaint, film capacitors include the following four generations: (1) film and aluminum foil capacitors, (2) film and other metal capacitors, (3) layered capacitors, and (4) surface-mount capacitors (*i.e.*, capacitors without leads). Each generation contains different types of general purpose capacitors and specific purpose capacitors.

9. Applications of film capacitors include appliances, lighting, power supply, digital AV, communications, games, direct current (DC) link for inverters, snubber for inverters, in battery filters, and in electric compressors.

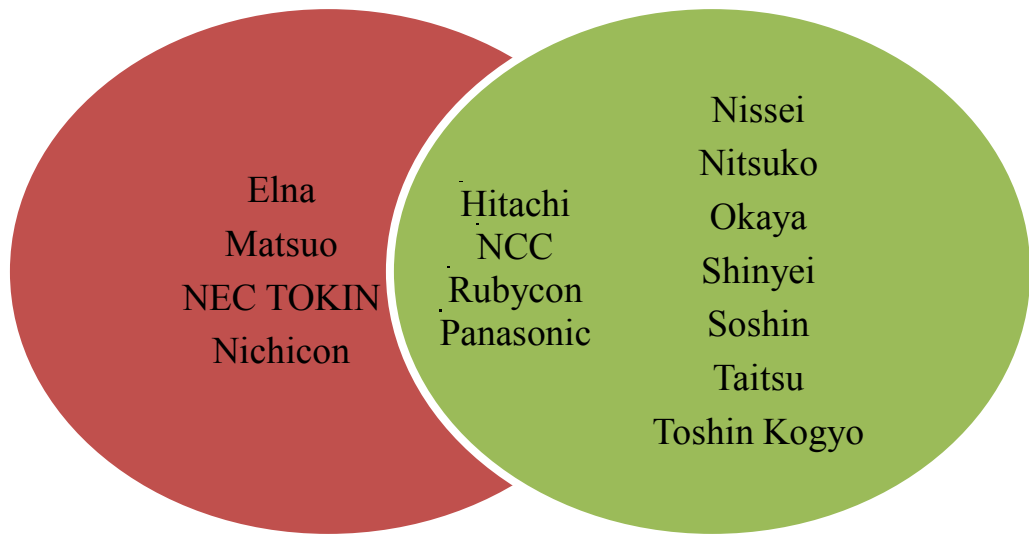


**Figure 2: The Panasonic defendants manufacture film capacitors.**



10. As hereinafter more fully alleged, the Hitachi, Nippon Chemi-Con (“NCC”), Rubycon, and Panasonic defendants participated in *two conspiracies*: the *electrolytic capacitor cartel* from January 1, 2003 until such time as defendants’ unlawful conduct ceased and the *film capacitor cartel* from January 1, 2007 until such time as defendants’ unlawful conduct ceased. The Elna, Matsuo, NEC TOKIN, and Nichicon defendants participated in the aforementioned *electrolytic capacitor cartel*. The Nissei, Nitsuko, Okaya, Shinyei, Soshin, Taitso, and Toshin Kogyo defendant families participated in the aforementioned *film capacitor cartel*. Defendants frequently discussed confidential and sensitive business information with each other, either at regular conspiratorial meetings, such as the Aluminum Tantalum Capacitor (ATC) meetings and Japan Film Capacitor (JFC) meetings, or through bilateral conspiratorial discussions to raise and stabilize electrolytic and film capacitor prices.

Figure 3: An illustration of electrolytic and film capacitor cartel memberships.



11. Defendants manufacture, market, and sell electrolytic and film capacitors throughout and into the United States. Defendants and other co-conspirators (as yet unknown) agreed, combined, and conspired to inflate, fix, raise, maintain or artificially stabilize prices of electrolytic and film capacitors. The combination and conspiracy engaged in by defendants and other co-conspirators was in violation of the Sherman Act (15 U.S.C. § 1) and various state antitrust, consumer protection, and unfair competition laws.

12. As a direct result of the anticompetitive and unlawful conduct alleged herein, Plaintiffs and the Classes paid artificially inflated prices for electrolytic and film capacitors during the respective Class Periods and have thereby suffered antitrust injury to their business or property.

## II. GOVERNMENT INVESTIGATIONS

13. Competition authorities in the United States, Asia, and Europe have been coordinating their investigations into the electrolytic and film capacitor cartels since March 2014 or earlier. The coordinated investigation between the United States Department of Justice (“DOJ”) and the China National Development and Reform Commission (“China NDRC”) *could be a first for both agencies.*

1           14. Several competition authorities in Asia have already conducted dawn raids on  
2 capacitor manufacturers. The China NDRC raided NEC TOKIN and non-defendant Taiyo Yuden<sup>3</sup>  
3 in March 2014. The South Korea Fair Trade Commission raided a Panasonic sales office in South  
4 Korea in early May 2014. And the Japan Fair Trade Commission (“JFTC”) raided nine companies  
5 suspected of forming *a cartel extending overseas from Japan*. These companies were Elna Co.,  
6 Ltd., Hitachi Chemical Co., Ltd., Matsuo Electric Co., Ltd., NEC TOKIN Corp., Nichicon Corp.,  
7 Nippon Chemi-Con Corp., Panasonic Corp., Rubycon Corp., and SANYO Electric Co., Ltd. on  
8 June 24, 2014. These companies collectively control either a large share of the Japanese market for  
9 electrolytic capacitors or the Japanese market for film capacitors. The JFTC alleges that these  
10 companies formed cartels in Japan, China, and United States, and their sales executives and other  
11 officials coordinated the amount and timing of price increases in the last several years. The JFTC  
12 stated that the conspiracies intensified after the 2008 economic crisis and again after the 2011 Great  
13 East Japan Earthquake when defendants aggressively controlled supply and coordinated price hikes  
14 to ensure supra-competitive prices for their products.

15           15. The DOJ investigation is originating out of its San Francisco office, which has been  
16 investigating cartels in the computer parts industry for the past decade, resulting in hundreds of  
17 millions of dollars in criminal fines against manufacturers of memory, liquid crystal displays,  
18 optical disc drives, and lithium-ion batteries. A capacitor manufacturer had approached the DOJ  
19 and China NDRC with news of anticompetitive conduct in the worldwide capacitor industry,  
20 launching what the DOJ’s Antitrust Division acknowledged as its *latest international cartel*  
21 *investigation*. The capacitor manufacturer also applied to the DOJ’s Corporate Leniency Program  
22 pursuant to the Antitrust Criminal Penalty Enhancement and Reform Act (“ACPERA”), which  
23 limits the civil liability of a leniency applicant to the actual damages attributable to the entity’s  
24 conduct rather than the usual joint and several and trebled damages faced by antitrust defendants.

25  
26 \_\_\_\_\_  
27 <sup>3</sup> Taiyo Yuden manufactures ceramic capacitors only. Plaintiffs have not named it as a defendant in  
this Complaint but reserve the right to do so upon further investigation.

1           16.     The DOJ investigation into the capacitor industry stemmed from a “leniency plus”  
2 situation in the DOJ investigation into the automotive parts industry. A leniency plus situation  
3 arises when a company unable to obtain leniency for one conspiracy can be given a lighter sentence  
4 by reporting its involvement in a separate, as yet undiscovered conspiracy. Plaintiffs believe that  
5 the leniency applicant is Panasonic Corp, which is a named defendant in three parts cases in *In re*  
6 *Automotive Parts Antitrust Litigation*, MDL No. 2311 (E.D. Mich.), including *In re Switches* (Case  
7 No. 2:13-cv-01300), *In re Steering Angle Sensors* (Case No. 2:13-cv-01600), and *In re High*  
8 *Intensity Discharge Ballasts* (Case No. 2:13-cv-01700). Plaintiffs believe Panasonic Corp.  
9 approached the DOJ and China NDRC about the electrolytic and film capacitor conspiracies after  
10 the DOJ charged and penalized it for participating in the switches, steering angle sensors, and high  
11 intensity discharge ballasts conspiracies.

12           17.     Notably, the defendants’ anticompetitive behavior is the subject of a DOJ criminal  
13 grand jury investigation. According to the Antitrust Division’s Manual, last revised in 2009, to  
14 institute a grand jury investigation, “staff should prepare a memorandum on behalf of the section or  
15 field office chief to the Director of Criminal Enforcement detailing the information forming the  
16 basis of the request.” Following a review of that memorandum, the request for a grand jury  
17 investigation must be approved by the Assistant Attorney General for the Antitrust Division based  
18 on the standard that a criminal violation may have occurred. Furthermore, the fact that the DOJ  
19 investigation is criminal, as opposed to civil, is significant. The Manual’s “Standards for  
20 Determining Whether to Proceed by Civil or Criminal Investigation” provides, “In general, current  
21 Division policy is to proceed by criminal investigation and prosecution in cases involving  
22 horizontal, *per se* unlawful agreements such as price fixing, bid rigging and horizontal customer  
23 and territorial allocations.” The existence of a criminal investigation into the electrolytic and film  
24 capacitor markets therefore support the existence of the conspiracies alleged in this Complaint.

25           18.     “***This has the hallmarks of a major international cartel investigation,***” said Philip  
26 Giordano, counsel at Kaye Scholer LLP and a 15-year veteran of the DOJ’s Antitrust Division  
27 (emphasis added). “The DOJ and its foreign counterparts are conducting ***parallel investigations.***”

Many of the manufacturers under investigation are *international conglomerates* that sell into *global markets*” (emphasis added).

### **III. JURISDICTION AND VENUE**

19. Plaintiffs bring this action under Section 16 of the Clayton Act (15 U.S.C. § 26) to secure equitable and injunctive relief against defendants for violating the Sherman Act (15 U.S.C. § 1). Plaintiffs also assert claims for actual and exemplary damages and injunctive relief pursuant to state antitrust, unfair competition, and consumer protection laws, and seek to obtain restitution, recover damages, and secure other relief against defendants for violation of those state laws. Plaintiffs and the Classes also seek attorneys’ fees, costs, and other expenses under federal and state laws.

20. This Court has subject matter jurisdiction pursuant to Section 16 of the Clayton Act (15 U.S.C. § 26), Section 1 of the Sherman Act (15 U.S.C. § 1), and 28 U.S.C. §§ 1331 and 1137. This Court also has subject matter jurisdiction of the state state law claims pursuant 28 U.S.C. § 1332(d) and 1367, in that: (i) this is a class action in which the matter or controversy exceeds the sum of \$5,000,000, exclusive of interest and costs, and in which some members of the proposed Classes are citizens of a state different from some defendants; and (ii) Plaintiffs’ state law claims form part of the same case or controversy as their federal claims under Article III of the United States Constitution.

21. Venue is proper in this District pursuant to Section 12 of the Clayton Act (15 U.S.C. § 22), and 28 U.S.C. §§ 1391(b)-(d) because a substantial part of the events giving rise to Plaintiffs’ claims occurred in this District, a substantial portion of the affected interstate trade and commerce discussed below has been carried out in this District, and one or more of the defendants reside, are licensed to do business in, are doing business in, had agents in, or are found or transact business in this District.

22. This Court has *in personam* jurisdiction over each of the defendants because each defendant, either directly or through the ownership and/or control of its United States subsidiaries, *inter alia*: (a) transacted business in the United States, including in this District; (b) directly or

1 indirectly sold or marketed substantial quantities of electrolytic and/or film capacitors throughout  
2 the United States, including in this District; (c) had substantial aggregate contacts with the United  
3 States as a whole, including in this District; or (d) were engaged in an illegal price-fixing  
4 conspiracy that was directed at, and had a direct, substantial, reasonably foreseeable and intended  
5 effect of causing injury to, the business or property of persons and entities residing in, located in, or  
6 doing business throughout the United States, including in this District. Defendants also conduct  
7 business throughout the United States, including in this District, and they have purposefully availed  
8 themselves of the laws of the United States.

9         23. In fact, the DOJ's investigation into the capacitor industry is originating out of its  
10 San Francisco office, which has been investigating cartels in the computer parts industry for the  
11 past decade, leading to hundreds of millions of dollars in fines against manufacturers of memory,  
12 liquid crystal displays, optical disc drives, and lithium-ion batteries. Although a former DOJ  
13 prosecutor stated that the DOJ is in the early stages of its investigation and there is some time  
14 before plea deals or indictments, the DOJ has empaneled a criminal grand jury in the Northern  
15 District of California to investigate anticompetitive conduct by capacitor manufacturers. The grand  
16 jury issued subpoenas to several capacitor manufacturers earlier this year. The DOJ has requested a  
17 stay of discovery in this action to protect its investigation.

18         24. Defendants engaged in conduct both inside and outside of the United States that  
19 caused direct, substantial, and reasonably foreseeable and intended anticompetitive effects upon  
20 interstate commerce within the United States.

21         25. The activities of defendants and their co-conspirators were within the flow of, were  
22 intended to, and did have, a substantial effect on interstate commerce in the United States.  
23 Defendants' products are sold in the flow of interstate commerce.

24         26. Electrolytic and film capacitors manufactured abroad by defendants and sold as  
25 stand-alone products, or as component parts of electronic products, that were either manufactured in  
26 the United States or manufactured abroad and sold in the United States, are goods brought into the  
27 United States for sale and therefore constitute import commerce. To the extent any electrolytic or

1 film capacitors are purchased in the United States, and such capacitors do not constitute import  
2 commerce, defendants' unlawful conduct with respect thereto, as more fully alleged herein during  
3 the respective Class Periods, had and continues to have a direct, substantial, and reasonably  
4 foreseeable effect on United States commerce. The anticompetitive conduct, and its effect on  
5 United States commerce described herein, caused antitrust injury to Plaintiffs and members of the  
6 Classes in the United States.

7 27. By reason of the unlawful activities hereinafter alleged, defendants substantially  
8 affected commerce throughout the United States, causing injury to Plaintiffs and members of the  
9 Classes. Defendants, directly and through their agents, engaged in activities affecting all states, to  
10 fix, raise, maintain and/or stabilize prices, and allocate market shares for electrolytic and film  
11 capacitors, which conspiracies unreasonably restrained trade and adversely affected the market for  
12 such capacitors.

13 28. Defendants' conspiracy and wrongdoing described herein adversely affected  
14 individuals and entities in the United States, including Plaintiffs and members of the Classes, who  
15 indirectly purchased electrolytic and/or film capacitors as stand-alone products or as component  
16 parts of electronic products.

#### 17 **IV. PARTIES**

##### 18 **A. Plaintiffs**

##### 19 **1. First-Level Indirect Purchaser Plaintiffs**

20 29. Plaintiff **Michael Brooks** is a California resident who purchased electrolytic and/or  
21 film capacitors as stand-alone products from one or more distributors that purchased such  
22 capacitors as stand-alone products from one or more defendants during the respective Class Periods.  
23 Plaintiff has been injured and is threatened with further injury as a result of the violations alleged in  
24 this Complaint.

25 30. Plaintiff **CAE Sound** is a California company with its principal place of business in  
26 California. Plaintiff purchased electrolytic and film capacitors as stand-alone products from one or  
27 more distributors that purchased such capacitors as stand-alone products from one or more

1 defendants during the respective Class Periods. Plaintiff has been injured and is threatened with  
2 further injury as a result of the violations alleged in this Complaint.

3 31. Plaintiff **Steve Wong** is a California resident who purchased electrolytic and/or film  
4 capacitors as stand-alone products from one or more distributors that purchased such capacitors as  
5 stand-alone products from one or more defendants during the respective Class Periods. Plaintiff has  
6 been injured and is threatened with further injury as a result of the violations alleged in this  
7 Complaint.

8 32. Plaintiff **Toy-Knowlogy Inc.** is a California company with its principal place of  
9 business in California. Plaintiff purchased electrolytic and film capacitors as stand-alone products  
10 from one or more distributors that purchased such capacitors as stand-alone products from one or  
11 more defendants during the respective Class Periods. Plaintiff has been injured and is threatened  
12 with further injury as a result of the violations alleged in this Complaint.

13 33. Plaintiff **Alfred H. Siegel** is the Liquidating Trustee of the Circuit City Stores, Inc.  
14 Liquidating Trust (the “Trust”). The Trust was established on or around November 1, 2010 in  
15 connection with the bankruptcy proceedings of Circuit City Stores, Inc. and its affiliates in the  
16 United States Bankruptcy Court, Eastern District of Virginia (Case No. 08-35653). Pursuant to the  
17 Second Amended Joint Plan of Liquidation of Circuit City Stores, Inc. and Its Affiliated Debtors  
18 and Debtors in Possession and Its Official Committee of Creditors Holding General Unsecured  
19 Claims (Dkt. No. 8252), and the Circuit City Stores, Inc. Liquidating Trust Agreement (Dkt. No.  
20 8864), the Liquidating Trustee has the authority to pursue claims on behalf of the Trust for the  
21 benefit of the Trust’s beneficiaries.

22 34. At all times relevant herein, Circuit City Stores, Inc. was incorporated in Virginia  
23 and had its principal place of business in Richmond, Virginia. Prior to the initiation of Chapter 11  
24 bankruptcy proceedings on November 10, 2008, Circuit City was one of the largest consumer  
25 electronics retailers in the United States with over 500 retail locations nationwide. During the  
26 relevant Class Period, Circuit City indirectly purchased capacitors as stand-alone products and as  
27  
28



1 components of products containing electrolytic and/or film capacitors from one or more of the  
2 Defendants. Plaintiff has been injured as a result of the violations alleged in this Complaint.

3 **2. Consumer Indirect Purchaser Plaintiffs**

4 35. Plaintiff **David Keller** is an Arizona resident who purchased laptops, a television, a  
5 tablet, and a cell phone containing electrolytic and/or film capacitors manufactured by one or more  
6 defendants during the respective Class Periods. Plaintiff has been injured and is threatened with  
7 further injury as a result of the violations alleged in this Complaint.

8 36. Plaintiff **Computing Solutions d/b/a Wired! By Computing Solutions d/b/a**  
9 **Wired! Technology Partners** (“Wired”) is an Arkansas company with its principal place of  
10 business located in Arkansas. Plaintiff purchased multiple electronic products including computers,  
11 laptops, printers, motherboards, servers, video cameras, routers, projectors, monitors, and switches,  
12 all containing electronic products containing electrolytic and/or film capacitors manufactured by  
13 one or more defendants during the respective Class Periods. Plaintiff has been injured and is  
14 threatened with further injury as a result of the violations alleged in this Complaint.

15 37. Plaintiff **Everett Ellis** is an Arkansas resident who purchased computers, televisions,  
16 a printer, and other devices and appliances containing electrolytic and/or film capacitors  
17 manufactured by one or more defendants during the respective Class Periods. Plaintiff has been  
18 injured and is threatened with further injury as a result of the violations alleged in this Complaint.

19 38. Plaintiff **BHRAC, LLC d/b/a Beverly Hills Rent-A-Car** is a Nevada company with  
20 its principal place of business in California. Plaintiff purchased multiple computers, printers, a  
21 television, and a laptop containing electrolytic and/or film capacitors manufactured by one or more  
22 defendants during the respective Class Periods. Plaintiff has been injured and is threatened with  
23 further injury as a result of the violations alleged in this Complaint.

24 39. Plaintiff **Thomas D. Armenti** is a California resident who purchased televisions  
25 containing electrolytic and/or film capacitors manufactured by one or more defendants during the  
26 respective Class Periods. Plaintiff has been injured and is threatened with further injury as a result  
27 of the violations alleged in this Complaint.

1           40. Plaintiff **David A. Bennett** is a California resident who purchased a television  
2 containing electrolytic and/or film capacitors manufactured by one or more defendants during the  
3 respective Class Periods. Plaintiff has been injured and is threatened with further injury as a result  
4 of the violations alleged in this Complaint.

5           41. Plaintiff **Beanstalk Computing** is a California company with its principal place of  
6 business in California. Plaintiff purchased computers and monitors containing electrolytic and/or  
7 film capacitors manufactured by one or more defendants during the respective Class Periods.  
8 Plaintiff has been injured and is threatened with further injury as a result of the violations alleged in  
9 this Complaint.

10          42. Plaintiff **Andrew Nassery** is a California resident who purchased computers, a game  
11 console, and television containing electrolytic and/or film capacitors manufactured by one or more  
12 defendants during the respective Class Periods. Plaintiff has been injured and is threatened with  
13 further injury as a result of the violations alleged in this Complaint.

14          43. Plaintiff **Benjamin Petiprin** is a California resident who purchased televisions and a  
15 computer containing electrolytic and/or film capacitors manufactured by one or more defendants  
16 during the respective Class Periods. Plaintiff has been injured and is threatened with further injury  
17 as a result of the violations alleged in this Complaint.

18          44. Plaintiff **Garth Russell, M.D.** is a Florida resident who purchased multiple  
19 computers, laptops, cell phones, and televisions containing electrolytic and/or film capacitors  
20 manufactured by one or more defendants during the respective Class Periods. Plaintiff has been  
21 injured and is threatened with further injury as a result of the violations alleged in this Complaint.

22          45. Plaintiff **Robert F. Chejlava** is an Illinois resident who purchased a laptop,  
23 television, and a projector containing electrolytic and/or film capacitors manufactured by one or  
24 more defendants during the respective Class Periods. Plaintiff has been injured and is threatened  
25 with further injury as a result of the violations alleged in this Complaint.

26          46. Plaintiff **Todd Stowater** is an Iowa resident who purchased MP3 players, a game  
27 console, a tablet, a cell phone, and a power tool containing electrolytic and/or film capacitors

1 manufactured by one or more defendants during the respective Class Periods. Plaintiff has been  
2 injured and is threatened with further injury as a result of the violations alleged in this Complaint.

3 47. Plaintiff **Jamie Thaemert** is a Kansas resident who purchased a computer, laptops,  
4 tablets, and a television containing electrolytic and/or film capacitors manufactured by one or more  
5 defendants during the respective Class Periods. Plaintiff has been injured and is threatened with  
6 further injury as a result of the violations alleged in this Complaint.

7 48. Plaintiff **Marie Parker** is a Maine resident who purchased a cell phone containing  
8 electrolytic and/or film capacitors manufactured by one or more defendants during the respective  
9 Class Periods. Plaintiff has been injured and is threatened with further injury as a result of the  
10 violations alleged in this Complaint.

11 49. Plaintiff **Michael R. Fisher** is a Minnesota resident who purchased televisions and a  
12 laptop containing electrolytic and/or film capacitors manufactured by one or more defendants  
13 during the respective Class Periods. Plaintiff has been injured and is threatened with further injury  
14 as a result of the violations alleged in this Complaint.

15 50. Plaintiff **John E. McDowell** is a Mississippi resident who purchased a television,  
16 mixing console, and a tablet containing electrolytic and/or film capacitors manufactured by one or  
17 more defendants during the respective Class Periods. Plaintiff has been injured and is threatened  
18 with further injury as a result of the violations alleged in this Complaint.

19 51. Plaintiff **Scott Huffman** is a Missouri resident who purchased computers, cell  
20 phones, and televisions containing electrolytic and/or film capacitors manufactured by one or more  
21 defendants during the respective Class Periods. Plaintiff has been injured and is threatened with  
22 further injury as a result of the violations alleged in this Complaint.

23 52. Plaintiff **Midwest Audio Corp.** is a Missouri company with its principal place of  
24 business in Missouri. Plaintiff purchased computers, cell phones, and televisions containing  
25 electrolytic and/or film capacitors manufactured by one or more defendants during the respective  
26 Class Periods. Plaintiff has been injured and is threatened with further injury as a result of the  
27 violations alleged in this Complaint.

1           53. Plaintiff **Charles Rusher** is a Missouri resident who purchased televisions, cell  
2 phones, speakers, a MP3 player, laptop, receiver, projector, and blu-ray player containing  
3 electrolytic and/or film capacitors manufactured by one or more defendants during the respective  
4 Class Periods. Plaintiff has been injured and is threatened with further injury as a result of the  
5 violations alleged in this Complaint.

6           54. Plaintiff **Troy Gibson** is a Nebraska resident who purchased a laptop, television, cell  
7 phone, and blu-ray player containing electrolytic and/or film capacitors manufactured by one or  
8 more defendants during the respective Class Periods. Plaintiff has been injured and is threatened  
9 with further injury as a result of the violations alleged in this Complaint.

10          55. Plaintiff **Marta Michaud** is a New York resident who purchased computers,  
11 televisions, tablets, a digital camera, and a printer containing electrolytic and/or film capacitors  
12 manufactured by one or more defendants during the respective Class Periods. Plaintiff has been  
13 injured and is threatened with further injury as a result of the violations alleged in this Complaint.

14          56. Plaintiff **David Standridge** is a New Mexico resident who purchased computers,  
15 cell phones, and televisions containing electrolytic and/or film capacitors manufactured by one or  
16 more defendants during the respective Class Periods. Plaintiff has been injured and is threatened  
17 with further injury as a result of the violations alleged in this Complaint.

18          57. Plaintiff **Thomas Scot Dunlap** is a North Carolina resident who purchased various  
19 electronic products, including mixers, power amps, and a BMW auto part containing electrolytic  
20 and/or film capacitors manufactured by one or more defendants during the respective Class Periods.  
21 Plaintiff has been injured and is threatened with further injury as a result of the violations alleged in  
22 this Complaint.

23          58. Plaintiff **Jane G. Schmit** is a North Dakota resident who purchased computers  
24 containing electrolytic and/or film capacitors manufactured by one or more defendants during the  
25 respective Class Periods. Plaintiff has been injured and is threatened with further injury as a result  
26 of the violations alleged in this Complaint.

1           59. Plaintiff **Sean G. Tarjoto** is an Oregon resident who purchased monitors, a camera,  
2 a video camera, a router, a keyboard, a wireless display kit, and a mouse containing electrolytic  
3 and/or film capacitors manufactured by one or more defendants during the respective Class Periods.  
4 Plaintiff has been injured and is threatened with further injury as a result of the violations alleged in  
5 this Complaint.

6           60. Plaintiff **Craig E. Swarthout** is a South Dakota resident who purchased a  
7 dishwasher, freezer, and induction burner containing electrolytic and/or film capacitors  
8 manufactured by one or more defendants during the respective Class Periods. Plaintiff has been  
9 injured and is threatened with further injury as a result of the violations alleged in this Complaint.

10           61. Plaintiff **Cetacea Sound, Inc.** is a Tennessee company with its principal place of  
11 business in Tennessee. Plaintiff purchased laptops and a computer containing electrolytic and/or  
12 film capacitors manufactured by one or more defendants during the respective Class Periods.  
13 Plaintiff has been injured and is threatened with further injury as a result of the violations alleged in  
14 this Complaint.

15           62. Plaintiff **MidSouth Investors** is a Tennessee corporation with its principal place of  
16 business in South Carolina. Plaintiff purchased a computer, cell phone, and printer containing  
17 electrolytic and/or film capacitors manufactured by one or more defendants during the respective  
18 Class Periods. Plaintiff has been injured and is threatened with further injury as a result of the  
19 violations alleged in this Complaint.

20           63. Plaintiff **Johnny Walker** is a Tennessee resident who purchased gaming consoles  
21 and a television containing electrolytic and/or film capacitors manufactured by one or more  
22 defendants during the respective Class Periods. Plaintiff has been injured and is threatened with  
23 further injury as a result of the violations alleged in this Complaint.

24           64. Plaintiff **Frederick P. Hege, Jr.** is a Vermont resident who purchased computers,  
25 printers, digital cameras, and a television containing electrolytic and/or film capacitors  
26 manufactured by one or more defendants during the respective Class Periods. Plaintiff has been  
27 injured and is threatened with further injury as a result of the violations alleged in this Complaint.

65. Plaintiff **Michael W. Davis** is a West Virginia resident who purchased computers, televisions, printers, and laptops containing electrolytic and/or film capacitors manufactured by one or more defendants during the respective Class Periods. Plaintiff has been injured and is threatened with further injury as a result of the violations alleged in this Complaint.

**B. Defendants**

66. This section identifies each of the defendants and describes the relationship of ownership or control between each defendant conspirator and its divisions, subsidiaries, or affiliates that sold capacitors to Plaintiffs and members of the Class. The relationships between the conspirators and sellers are characterized by the ability to exercise restraint or direction; to dominate, regulate, or command; and/or to have the power or authority to guide or manage.

**1. Defendants Involved in Both Electrolytic and Film Capacitor Conspiracies**

**a. Hitachi Defendants**

67. Defendant Hitachi Chemical Co., Ltd. is a Japanese corporation with its principal place of business in Tokyo, Japan. Hitachi Chemical Co. is one of the world's leading manufacturers of capacitors. Hitachi Chemical Co., Ltd.—directly and/or through its subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold electrolytic capacitors and film capacitors that were purchased throughout the United States, including in this District, during the respective Class Periods. The JFTC raided Hitachi Chemical Co., Ltd. in June 2014 in connection with its investigation of the capacitor industry.

68. Defendant Hitachi AIC Inc. is a Japanese corporation with its principal place of business in Tochigi, Japan. It is a subsidiary of and wholly owned and/or controlled by its Japanese parent, Hitachi Chemical Co., Ltd. Hitachi AIC Inc. manufactured, marketed, and/or sold electrolytic capacitors and film capacitors that were purchased throughout the United States, including in this District, during the respective Class Periods.

69. Defendant Hitachi Chemical Co. America, Ltd. is a New York corporation with its principal place of business in Cupertino, California. It is a subsidiary of and wholly owned and/or controlled by its Japanese parent, Hitachi Chemical Co., Ltd. Hitachi Chemical Co. America, Ltd.

1 manufactured, marketed, and/or sold electrolytic and film capacitors that were purchased  
2 throughout the United States, including in this District, during the respective Class Periods.

3 70. Defendants Hitachi Chemical Co., Ltd., Hitachi AIC Inc., and Hitachi Chemical Co.  
4 America, Ltd. are herein referred to as “Hitachi.”

5 **b. Nippon Chemi-Con Defendants**

6 71. Defendant Nippon Chemi-Con Corp. is a Japanese corporation with its principal  
7 place of business in Tokyo, Japan. Nippon Chemi-Con Corp. is one of the world’s leading  
8 manufacturers of capacitors. Nippon Chemi-Con Corp.—directly and/or through its subsidiaries,  
9 which it wholly owned and/or controlled—manufactured, marketed, and/or sold electrolytic and  
10 film capacitors that were purchased throughout the United States, including in this District, during  
11 the respective Class Periods. The JFTC raided Nippon Chemi-Con Corp. in June 2014 in  
12 connection with its investigation of the capacitor industry.

13 72. Defendant United Chemi-Con, Inc. is an Illinois corporation with its principal place  
14 of business in Rosemont, Illinois. It is a subsidiary of and wholly owned and/or controlled by its  
15 Japanese parent, Nippon Chemi-Con Corp. United Chemi-Con, Inc. manufactured, marketed,  
16 and/or sold electrolytic and film capacitors that were purchased throughout the United States,  
17 including in this District, during the respective Class Periods.

18 73. Defendants Nippon Chemi-Con Corp. and United Chemi-Con, Inc. are herein  
19 collectively referred to as “Nippon Chemi-Con.”

20 **c. Rubycon Defendants**

21 74. Defendant Rubycon Corp. is a Japanese corporation with its principal place of  
22 business in Nagano, Japan. Rubycon Corp. is one of the world’s leading manufacturers of  
23 capacitors. Rubycon Corp.—directly and/or through its subsidiaries, which it wholly owned and/or  
24 controlled—manufactured, marketed, and/or sold electrolytic and film capacitors that were  
25 purchased throughout the United States, including in this District, during the respective Class  
26 Periods. The JFTC raided Rubycon Corp. in June 2014 in connection with its investigation of the  
27 capacitor industry.

1           75. Defendant Rubycon America Inc. is an Illinois corporation with its principal place of  
2 business in Gurnee, Illinois. It is a subsidiary of and wholly owned and/or controlled by its  
3 Japanese parent, Rubycon Corp. Rubycon America Inc. manufactured, marketed, and/or sold  
4 electrolytic and film capacitors that were purchased throughout the United States, including in this  
5 District, during the respective Class Periods.

6           76. Defendants Rubycon Corp. and Rubycon America Inc. are herein collectively  
7 referred to as “Rubycon.”

8                           **d. Panasonic Defendants**

9           77. Defendant Panasonic Corp. is a Japanese corporation with its principal place of  
10 business in Osaka, Japan. Panasonic Corp. is one of the world’s leading manufacturers of  
11 capacitors. Panasonic Corp.—directly and/or through its subsidiaries, which it wholly owned  
12 and/or controlled—manufactured, marketed, and/or sold electrolytic and film capacitors that were  
13 purchased throughout the United States, including in this District, during the Film Class Period.  
14 The JFTC raided Panasonic Corp. in June 2014 in connection with its investigation of the capacitor  
15 industry. The DOJ, China NDRC, Korea FTC, and EC are also investigating Panasonic Corp.  
16 Panasonic Corp. has applied for the DOJ’s and China NDRC’s leniency programs, meaning it will  
17 likely receive amnesty from criminal prosecution in return for full cooperation with government  
18 antitrust authorities.

19           78. Defendant Panasonic Corp. of North America is a Delaware corporation with its  
20 principal place of business in Newark, New Jersey. It is a subsidiary of and wholly owned and/or  
21 controlled by its Japanese parent, Panasonic Corp. Panasonic Corp. of North America  
22 manufactured, marketed, and/or sold electrolytic and film capacitors that were purchased  
23 throughout the United States, including in this District, during the Film Class Period.

24           79. Defendant SANYO Electric Co., Ltd. is a Japanese corporation with its principal  
25 place of business in Osaka, Japan. SANYO Electric Co., Ltd.—directly and/or through its  
26 subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold  
27  
28



1 electrolytic capacitors that were purchased throughout the United States, including in this District,  
2 during the Electrolytic Class Period.

3 80. Defendant SANYO Electronic Device (U.S.A.) Corp. is a Delaware corporation with  
4 its principal place of business in San Diego, California. It is a subsidiary of and wholly owned  
5 and/or controlled by its Japanese parent, SANYO Electric Co., Ltd. SANYO Electronic Device  
6 (U.S.A.) Corp. manufactured, marketed, and/or sold electrolytic capacitors that were purchased  
7 throughout the United States, including in this District, during the Electrolytic Class Period.

8 81. Panasonic Corp. acquired a majority of shares of SANYO Electric Co., Ltd. on  
9 December 10, 2009 and the remaining shares of SANYO Electric Co., Ltd. on April 1, 2011.

10 82. Defendants SANYO Electric Co., Ltd. and SANYO Electronic Device (U.S.A.)  
11 Corp. are herein collectively referred to as “SANYO” for allegations pertaining to them before  
12 December 10, 2009.

13 83. Defendants Panasonic Corp., Panasonic Corp. of North America, SANYO Electric  
14 Co., Ltd., and SANYO Electronic Device (U.S.A.) Corp. are herein collectively referred to as  
15 “Panasonic” for allegations pertaining to them after December 10, 2009.

## 16 2. Defendants Involved in Electrolytic Capacitor Conspiracy

### 17 a. Elna Defendants

18 84. Defendant Elna Co., Ltd. is a Japanese corporation with its principal place of  
19 business in Yokohama, Japan. Elna Co., Ltd.—directly and/or through its subsidiaries, which it  
20 wholly owned and/or controlled—manufactured, marketed, and/or sold electrolytic capacitors that  
21 were purchased throughout the United States, including in this District, during the Electrolytic  
22 Class Period. The JFTC raided Toshin Kogyo Co., Ltd. in June 2014 in connection with its  
23 investigation of the capacitor industry. The DOJ and China NDRC are also investigating Elna Co.,  
24 Ltd.

25 85. Defendant Elna America Inc. is a California corporation with its principal place of  
26 business in Gardena, California. It is a subsidiary of and wholly owned and/or controlled by its  
27 Japanese parent, Elna Co., Ltd. Elna America Inc. manufactured, marketed, and/or sold electrolytic

capacitors that were purchased throughout the United States, including in this District, during the Electrolytic Class Period.

86. Defendants Elna Co., Ltd. and Elna America Inc. are herein collectively referred to as “Elna.”

**b. Defendant Matsuo Electric Co., Ltd.**

87. Defendant Matsuo Electric Co., Ltd. is a Japanese corporation with its principal place of business in Osaka, Japan. Matsuo Electric Co., Ltd.—directly and/or through its subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold electrolytic capacitors that were purchased throughout the United States, including in this District, during the Electrolytic Class Period.

88. Defendant Matsuo Electric Co., Ltd. is herein referred to as “Matsuo.”

**c. NEC TOKIN Defendants**

89. Defendant NEC TOKIN Corp. is a Japanese corporation with its principal place of business in Miyagi, Japan. NEC TOKIN Corp.—directly and/or through its subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold electrolytic capacitors that were purchased throughout the United States, including in this District, during the Electrolytic Class Period. The China NDRC raided NEC TOKIN Corp. in March 2014 in connection with its investigation of the capacitor industry. The DOJ, Korea FTC, and EC are also investigating NEC TOKIN Corp..

90. Defendant NEC TOKIN America Inc. is a California corporation with its principal place of business in San Jose, California. It is a subsidiary of and wholly owned and/or controlled by its Japanese parent, NEC TOKIN Corp. NEC TOKIN America Inc. manufactured, marketed, and/or sold electrolytic capacitors that were purchased throughout the United States, including in this District, during the Electrolytic Class Period.

91. Defendants NEC TOKIN Corp. and NEC TOKIN America Inc. are herein collectively referred to as “NEC TOKIN.”

1                                    **d.       Nichicon Defendants**

2            92.       Defendant Nichicon Corp. is a Japanese corporation with its principal place of  
3 business in Kyoto, Japan. Nichicon Corp.—directly and/or through its subsidiaries, which it wholly  
4 owned and/or controlled—manufactured, marketed, and/or sold electrolytic capacitors that were  
5 purchased throughout the United States, including in this District, during the Electrolytic Class  
6 Period. The JFTC raided Nichicon Corp. in June 2014 in connection with its investigation of the  
7 capacitor industry. The DOJ is also investigating Nichicon Corp.

8            93.       Defendant Nichicon America Corp. is an Illinois corporation with its principal place  
9 of business in Schaumburg, Illinois. It is a subsidiary of and wholly owned and/or controlled by its  
10 Japanese parent, Nichicon Corp. Nichicon America Corp. manufactured, marketed, and/or sold  
11 electrolytic capacitors that were purchased throughout the United States, including in this District,  
12 during the Electrolytic Class Period.

13           94.       Fujitsu Media Devices, Ltd. was a Japanese corporation with its principal place of  
14 business in Yokohama, Japan. Fujitsu Media Devices, Ltd.—directly and/or through its  
15 subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold  
16 electrolytic capacitors that were purchased throughout the United States, including in this District,  
17 during the Electrolytic Class Period. On October 30, 2008, Nichicon Corp. acquired Fujitsu Media  
18 Devices (Suzhou), Ltd.’s conductive polymer aluminum solid electrolytic capacitor business.

19           95.       On February 6, 2013, Nichicon Corp. sold its solid tantalum electrolytic capacitors  
20 business to AVX Corp.<sup>4</sup> Nichicon Corp. continued to manufacture, market, and/or sell other  
21 electrolytic capacitors (*e.g.*, polymer aluminum electrolytic capacitors) after the sale.

22           96.       Defendants Nichicon Corp., Nichicon America Corp., and Fujitsu Media Devices,  
23 Ltd. are herein collectively referred to as “Nichicon.”

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26  
27       <sup>4</sup> Plaintiffs have not named AVX Corp. as a defendant in this Complaint but reserve the right to do  
28 so upon further investigation.

1                                   **3.     Defendants Involved in Film Capacitor Conspiracy**

2                                   **a.     Defendant Nissei Electric Co., Ltd.**

3             97.     Defendant Nissei Electric Co., Ltd. is a Japanese corporation with its principal place  
4 of business in Shizuoka, Japan. Nissei Electric Co., Ltd.—directly and/or through its subsidiaries,  
5 which it wholly owned and/or controlled—manufactured, marketed, and/or sold film capacitors that  
6 were purchased throughout the United States, including in this District, during the Film Class  
7 Period.

8             98.     Defendant Nissei Electric Co., Ltd. is herein referred to as “Nissei.”

9                                   **b.     Defendant Nitsuko Electronics Corp.**

10            99.     Defendant Nitsuko Electronics Corp. is a Japanese corporation with its principal  
11 place of business in Nagano, Japan. Nitsuko Electronics Corp.—directly and/or through its  
12 subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold film  
13 capacitors that were purchased throughout the United States, including in this District, during the  
14 Film Class Period.

15            100.    Defendant Nitsuko Electronics Corp. is herein referred to as “Nitsuko.”

16                               **c.     Defendant Okaya Electric Industries Co., Ltd.**

17            101.    Defendant Okaya Electric Industries Co., Ltd. is a Japanese corporation with its  
18 principal place of business in Tokyo, Japan. Okaya Electric Industries Co., Ltd.—directly and/or  
19 through its subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or  
20 sold film capacitors that were purchased throughout the United States, including in this District,  
21 during the Film Class Period.

22            102.    Defendant Okaya Electric Industries Co., Ltd. is herein referred to as “Okaya.”

23                               **d.     Shinyei Defendants**

24            103.    Defendant Shinyei Technology Co., Ltd. is a Japanese corporation with its principal  
25 place of business in Kobe, Japan. Shinyei Technology Co., Ltd.—directly and/or through its  
26 subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold film  
27

capacitors that were purchased throughout the United States, including in this District, during the Film Class Period.

104. Defendant Shinyei Capacitor Co., Ltd. is a Japanese corporation with its principal place of business in Tokyo, Japan. Shinyei Capacitor Co., Ltd.—directly and/or through its subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold film capacitors that were purchased throughout the United States, including in this District, during the Film Class Period.

105. On February 3, 2011, Shinyei Technology Co., Ltd. established Shinyei Capacitor Co., Ltd. to take over Shinyei Technology Co., Ltd.’s capacitor business. Shinyei Capacitor Co., Ltd. began to manufacture, market, and/or sell film capacitors in April 2011, at which time Shinyei Technology Co., Ltd. ceased to manufacture, market, and/or sell such capacitors.

106. Defendants Shinyei Technology Co., Ltd. and Shinyei Capacitor Co., Ltd. are herein collectively referred to as “Shinyei.”

**e. Defendant Soshin Electric Co., Ltd.**

107. Defendant Soshin Electric Co., Ltd. is a Japanese corporation with its principal place of business in Tokyo, Japan. Soshin Electric Co., Ltd.—directly and/or through its subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold film capacitors that were purchased throughout the United States, including in this District, during the Film Class Period.

108. Defendant Soshin Electric Co., Ltd. is herein referred to as “Soshin.”

**f. Defendant Taitsu Corp.**

109. Defendant Taitsu Corp. is a Japanese corporation with its principal place of business in Kanagawa, Japan. Taitsu Corp.—directly and/or through its subsidiaries, which it wholly owned and/or controlled—manufactured, marketed, and/or sold film capacitors that were purchased throughout the United States, including in this District, during the Film Class Period.

110. Defendant Taitsu Corp. is herein referred to as “Taitsu.”

1                                   **g. Defendant Toshin Kogyo Co., Ltd.**

2           111. Defendant Toshin Kogyo Co., Ltd. is a Japanese corporation with its principal place  
3 of business in Tokyo, Japan. Toshin Kogyo Co., Ltd.—directly and/or through its subsidiaries,  
4 which it wholly owned and/or controlled—manufactured, marketed, and/or sold film capacitors that  
5 were purchased throughout the United States, including in this District, during the Film Class  
6 Period. The JFTC raided Toshin Kogyo Co., Ltd. in June 2014 in connection with its investigation  
7 of the capacitor industry.

8           112. Defendant Toshin Kogyo Co., Ltd. is herein referred to as “Toshin Kogyo.”

9           **V. AGENTS AND CO-CONSPIRATORS**

10          113. Each defendant acted as the principal of or agent for the other defendant with respect  
11 to the acts, violations, and common course of conduct alleged herein.

12          114. Various persons, partnerships, sole proprietors, firms, corporations, and individuals  
13 not named as defendants in this lawsuit, and individuals, the identities of which are presently  
14 unknown, have participated as co-conspirators with the defendants in the offenses alleged in this  
15 Complaint, and have performed acts and made statements in furtherance of the conspiracy, or in  
16 furtherance of the anticompetitive conduct. Plaintiffs reserves the right to name some or all of these  
17 persons and entities as defendants at a later date.

18          115. Whenever in this Complaint reference is made to any act, deed, or transaction of any  
19 corporation or limited liability entity, the allegation means that the corporation or limited liability  
20 entity engaged in the act, deed or transaction by or through its officers, directors, agents,  
21 employees, or representatives while they were actively engaged in the management, direction,  
22 control, or transaction of the corporation’s or limited liability entity’s business or affairs.

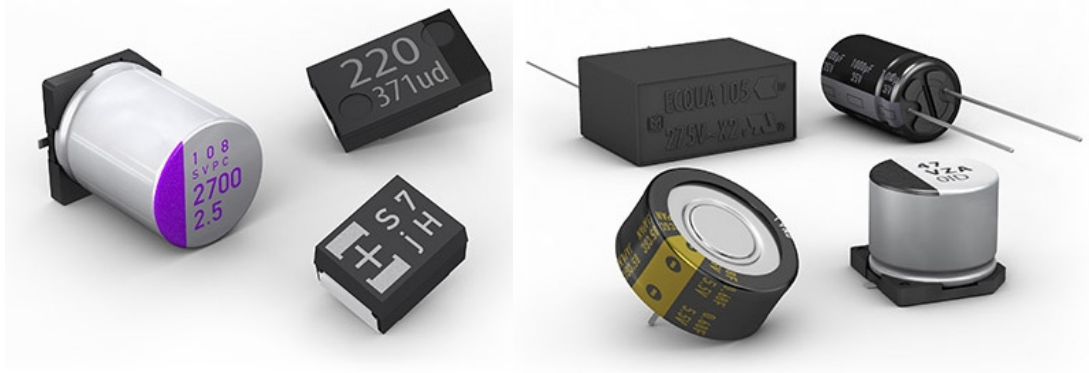
23           **VI. INTRODUCTION TO CAPACITORS**

24           **A. Background on Capacitors**

25          116. Capacitors are devices used to store electricity and are fundamental electronic  
26 components that influence electronic circuits. Although the form of capacitors varies widely  
27 (Figure 3), a typical capacitor consists of two or more parallel, but not touching, electrical

conductors (plates), which are electrically separated by a dielectric (insulator). Capacitors have applications in both analog and digital circuits, and have voltages from less than one volt to several thousand volts. When connected to an alternating current (AC) circuit, a capacitor allows current to flow through it with little or no resistance. When connected to a direct current (DC) circuit, a capacitor blocks the flow of current through it and charges up to its supply voltage because the dielectric is a non-conductive insulator. A capacitor therefore has the capacity to store energy in the form of an electrostatic field between its plates and is used as part of electrical circuits in many common electronic devices.

**Figure 3: A Few Forms of Capacitors**



117. Capacitors are similar to batteries in that both store electrical energy. A battery has two terminals, one that produces electrons through chemical reactions and another that absorbs electrons. A capacitor is simpler than a battery in that it only stores electrons and does not produce them.

118. A capacitor is analogous to a water tower hooked to a pipe. A capacitor stores electrons much like a water tower “stores” water pressure. When the water system pumps more water than a town needs, the excess is stored in the water tower. Then, at times of high demand, the excess water flows out of the tower to keep the pressure up. A capacitor stores electrons in the same way and can then release them later.<sup>5</sup>

<sup>5</sup> Marshall Brain and Charles W. Bryant, *How Capacitors Work*. HOWSTUFFWORKS, 2007, <http://electronics.howstuffworks.com/capacitor1.htm>.

119. Capacitors occur naturally. Lightning is a natural capacitor: The cloud and the ground are plates, and the lightning is the charge releasing between the two plates (Figure 4). Capacitors can also occur inadvertently: Two parallel wires on a printed circuit board form a capacitor and can have unintended effects on the circuit's behavior.

### Figure 4: Natural Capacitor

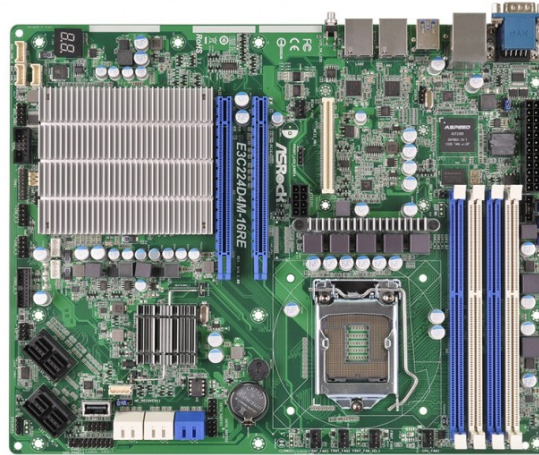


Source: [http://www.cabrillo.edu/~jmccullough/Applets/Other\\_Applet\\_Images/Electricity\\_Magnetism/Lightning.JPG](http://www.cabrillo.edu/~jmccullough/Applets/Other_Applet_Images/Electricity_Magnetism/Lightning.JPG)

120. Forbes, a leading source for business news and financial information, reported: “Capacitors are *ubiquitous electronic components* found in a vast array of electronic devices, from consumer electronics to heavy machinery. *Manufacturers produce trillions of them a year*” (emphasis added). There can be hundreds or thousands of them in a single finished product. One technical paper by a capacitor manufacturer stated, “[T]hese often tiny devices can have a significant effect on product performance, end-of-line production yield, reliability and lifetime in the field, and in some cases, safety.” Figure 5 shows a motherboard mounted with hundreds of capacitors.



Figure 5: Capacitor Motherboard



Source: [http://www.legitreviews.com/asrock-releases-first-12g-sas-3-motherboard\\_132574](http://www.legitreviews.com/asrock-releases-first-12g-sas-3-motherboard_132574)

121. Capacitors can be manufactured to serve many purposes—from the smallest plastic capacitor in a calculator to a supercapacitor that powers a commuter bus. NASA relies on glass capacitors to wake up space shuttle circuitry and deploy space probes. Indeed, capacitors are found in almost every electronic device and are one of the most ubiquitous passive components. Capacitors have numerous essential applications in circuit design—providing flexible filter options, noise reduction, power storage, and sensing capabilities, among others.

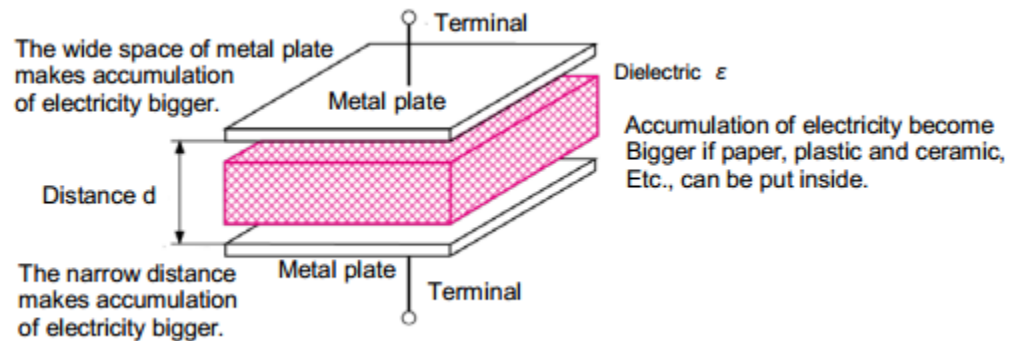
122. Capacitors are a mainstay in our fast-paced, technology-driven world and have had exponentially increasing applications over the last several decades. They are extensively used in nearly all electronic products. For example, the capacitive touch screen—once cost-prohibitive and rare—is in game consoles, personal computers, tablet computers, and smartphones today. Apple Inc.’s iPad contains about 700 capacitors, and its iPhone contains about 500 capacitors. The iPhone market alone has spurred the production of billions, if not trillions, of capacitors.

#### **B. Capacitor Structure**

123. A capacitor is a passive electronic component that stores energy as an electric field. A basic capacitor consists of two conductors (plates) separated by the dielectric (insulator). When a voltage exists between the two conductors, an electric field is present in the dielectric, which stores energy.

124. While capacitors are just one type of electronic component, there are many types of capacitors. The dielectric material primarily differentiates the variety of capacitor. A capacitor's **capacitance** (storage potential) is measured in farads<sup>6</sup> and is directly proportional to the **surface area** of the plates, inversely proportional to the **distance** between the plates, and **dependent** on the **dielectric material**. In other words, larger plates mean more storage potential; a shorter distance between plates means more storage potential; and a larger dielectric constant<sup>7</sup> of the insulator material means more storage potential. Figure 6 illustrates the structure of a capacitor.

**Figure 6: Capacitor Structure**



Source: [http://industrial.panasonic.com/jp/i/29880/TAL\\_E/TAL\\_E.pdf](http://industrial.panasonic.com/jp/i/29880/TAL_E/TAL_E.pdf)

125. The dielectric dictates the form and function of a capacitor. The dielectric can be made of any non-conductive substance. Some capacitors are better for high-frequency uses while others are better for high-voltage applications depending on the material and size of the dielectric. In terms of material, for example, an air dielectric is commonly used in radio tuning circuits and a ceramic dielectric in high-frequency applications, such as antennas, x-rays, and magnetic resonance imaging. And regarding size, for example, small capacitors can be used in clocks and large capacitors, in power supply.

126. At the most basic level, capacitors must be able to: (1) store electric energy, (2) separate different DC voltages from each other, and (3) conduct AC current. An ideal capacitor has the desired capacitance and is the perfect insulator.

<sup>6</sup> The unit of electrical capacitance, equal to the capacitance of a capacitor in which one coulomb of charge causes a potential difference of one volt.

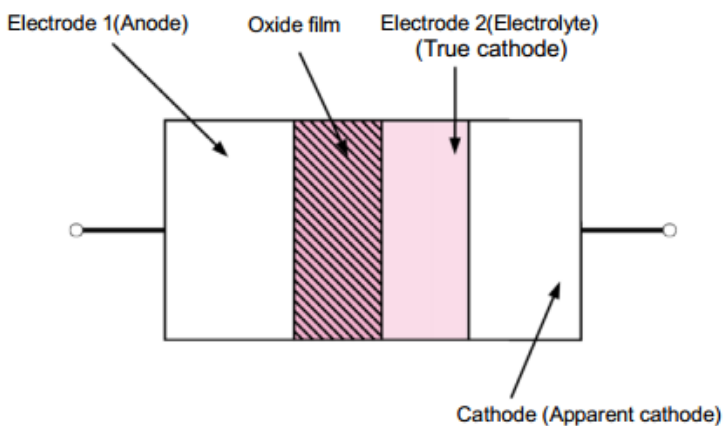
<sup>7</sup> A quantity measuring the ability of a substance to store electrical energy in an electric field.

### C. Capacitor Technologies

127. Capacitors can be divided into two basic groups: electrolytic capacitors and electrostatic capacitors. Electrolytic capacitors and film capacitors—a type of electrostatic capacitors—are the subjects of this Complaint.

128. *Electrolytic capacitors* are asymmetrical, polarized constructions. The dielectric, or insulator, is made of materials like aluminum, tantalum, niobium, or zircon while the conductors are made of a variety of metals. Aluminum, tantalum, or other metal foils or powders create the positive connection (anode). Electrolytic capacitors use an electrolyte that creates a negative connection (cathode). The dielectric layer is created by forming a thin oxide film on the metal anode and may be maintained by the electrolyte. For example, in aluminum electrolytic capacitors, the anode is aluminum, the dielectric is the aluminum oxide, and the liquid electrolyte is the cathode. Figure 7 depicts the layers of an electrolytic capacitor. The type of electrolytic capacitor depends on the material of the oxide film that forms the dielectric. Because electrolytic capacitors are polarized, they must be carefully designed and correctly inserted into circuits. Electrolytic capacitors are generally used for relatively large capacitance values in a reasonable size.

**Figure 7: Electrolytic Capacitor Structure**



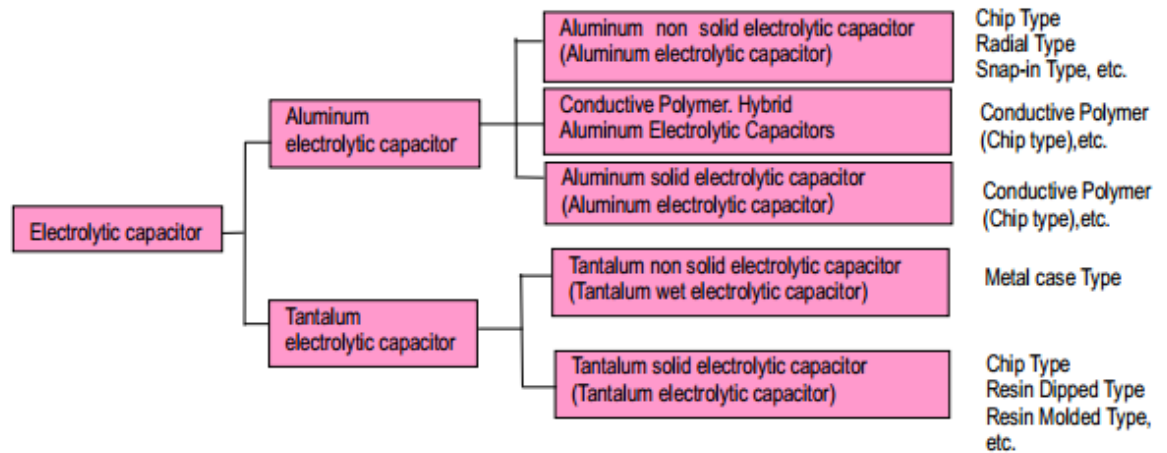
Source: [http://industrial.panasonic.com/jp/i/29880/TAL\\_E/TAL\\_E.pdf](http://industrial.panasonic.com/jp/i/29880/TAL_E/TAL_E.pdf)

129. *Electrostatic capacitors* are symmetrical, non-polarized constructions. The dielectric is made of materials like plastic film and ceramic while the conductors are made of a variety of metals. Because electrostatic capacitors are not polarized, they can generally be inserted

into a circuit without regard to which points the terminals are connected. Electrostatic capacitors are generally used for small or precision capacitance values.

130. The electrolytic and film capacitor markets include different types of capacitors. Concerning electrolytic capacitors, the allegations in this Complaint relate to polymer aluminum electrolytic capacitors, polymer tantalum electrolytic capacitors, non-polymer aluminum electrolytic capacitors, and non-polymer ELDC. Companies manufacture electrolytic capacitors in different shapes, such as circular and rectangular. Figure 8 provides a basic breakdown of electrolytic capacitors. Concerning film capacitors, which are less complex than electrolytic capacitors, the allegations in this Complaint relate to four generations: film and aluminum foil capacitors, film and other metal capacitors, layered capacitors, and surface-mount capacitors (*i.e.*, capacitors without leaves).

**Figure 8: Electrolytic Capacitors**



Source: <http://industrial.panasonic.com/www-data/pdf/ABA0000/ABA0000TE2.pdf>

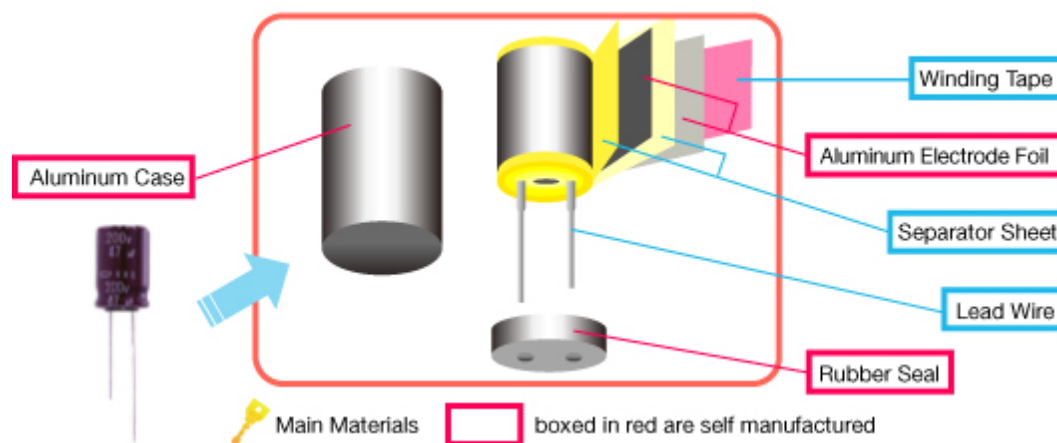
131. Defendants manufactured, marketed, and/or sold electrolytic and/or film capacitors in and into the United States during the respective Class Periods. Defendants and other co-conspirators (as yet unknown) agreed, combined and conspired to fix, raise, maintain and/or stabilize prices, and to allocate market shares for electrolytic and film capacitors.

#### D. Aluminum Electrolytic Capacitors

132. Aluminum electrolytic capacitors are made of two aluminum foils and a paper spacer soaked in electrolyte. One of the two aluminum foils is covered with an oxide layer, and that foil acts as the anode, while the uncoated one acts as a cathode. The anode, electrolyte-soaked paper and cathode are stacked. The stack is rolled, placed into a cylindrical enclosure and connected to the circuit using pins (*see* Figure 9).

133. Aluminum capacitors are highly reliable and have a long life. They also have characteristics like high capacitance, low electrical impedance, low profile, and low cost. They are used in home appliances, information communication devices, and industrial devices. TVs and computers are critical end-use markets for aluminum capacitors because flat panel TVs and desktop and notebook computers are aluminum capacitor-intensive.

**Figure 9: Basic Structure of Aluminum Electrolytic Capacitor**



Source: [http://www.chemi-con.co.jp/e/ir/per\\_condenser.html](http://www.chemi-con.co.jp/e/ir/per_condenser.html)

134. Aluminum electrolytic capacitors are an essential electronic component of our lives—each home uses about 1,000 of them. Aluminum electrolytic capacitors are incorporated into products of various sizes because they can store large amounts of electricity. Aluminum capacitors are typically used in large electronic devices, such as televisions, computers, consumer audio and video devices, video game consoles, and navigation systems. Figure 10 shows the many applications of aluminum electrolytic capacitors as well as the amount of said capacitors in each

product. The market for aluminum capacitors has been negatively impacted by the rise of the tablet computer and corresponding slowdown in sales of desktop and notebook computers.

**Figure 10: Applications of Aluminum Electrolytic Capacitors**

					
Flat-Screen TV	Personal Computer	Home Video Game Machine	Inverter Driven Air Conditioner	Inverter Driven Washing Machine	PV Power Conditioner
10 - 60 pcs	10 - 60 pcs	10 - 30 pcs	20 - 30 pcs	20 - 30 pcs	30 - 50 pcs

Source: [http://www.chemi-con.co.jp/e/ir/per\\_condenser.html](http://www.chemi-con.co.jp/e/ir/per_condenser.html)

135. Other uses include lighting applications (*e.g.*, crane lighting, lighted buoys, barge lights, highway maintenance, lighting for construction equipment, emergency airport lighting, bridge lighting) and renewable energy generating systems (*e.g.*, geothermal systems, solar energy systems, windmills, wave generation systems).

136. Aluminum electrolytic capacitors are a specialty component compared to ceramic capacitors, a trillion plus of which manufactured a year, but are essential to electronic products that require a higher capacitance than ceramic capacitors can offer. Aluminum capacitors provide a combination of high capacitance and high voltage without the constraints of volumetric inefficiency.

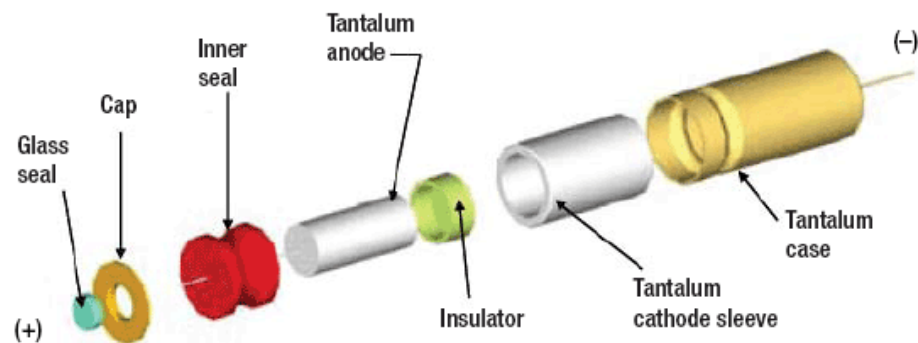
#### **E. Tantalum Electrolytic Capacitors**

137. Tantalum is a rare, hard, blue-gray metal and a “conflict mineral” per the United Nations and the Dodd-Frank Act. The tantalum market is therefore subject to frequent supply and price fluctuations. Key hard and soft rock mining operations for tantalum have either closed or idled in Australia, Canada, Ethiopia, and Mozambique, leaving artisan sources in South America and Central Africa to meet the demand from recycled metal or existing stockpiles. Despite the challenging supply chain, high production costs, and being considerably more expensive than aluminum, the demand for tantalum capacitors remains because it offers the highest capacitance in

the smallest form, relative longevity, and known reliability. Applications requiring high reliability include engine management, avionics, and safety and military equipment.

138. Tantalum electrolytic capacitors are made of tantalum metal which acts as an anode, covered by a layer of oxide which acts as the dielectric, surrounded by a conductive. The use of tantalum allows for a very thin dielectric layer. A thin dielectric layer results in a higher capacitance value per volume, superior frequency characteristics compared to many other types of capacitors, and excellent stability over time. Figure 11 is an exploded view of a basic tantalum electrolytic capacitor. Technological advances allow tantalum capacitors to be used in a wide variety of circuits, often found in laptops, cell phones, and others, most often in the form of surface mounted devices. Surface mount tantalum capacitors claim much less space on the printed circuit board and allow for greater packing densities.

**Figure 11: Basic Structure of Tantalum Electrolytic Capacitor**



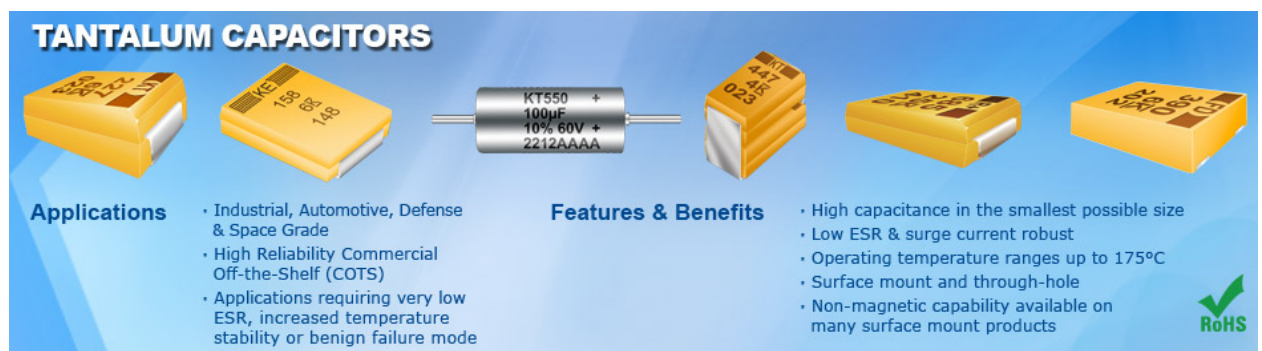
Source: <http://powerelectronics.com/sitefiles/powerelectronics.com/files/archive/powerelectronics.com/images/tantalum-capacitors-dscc-93026-Figure01.jpg>

139. Applications using tantalum electrolytic capacitors take advantage of their low leakage current, high capacity and long term stability, and reliability. For example, they are used in sample and hold circuits which rely on low leakage current to achieve long hold duration. They are also commonly used for power supply filtering on computer motherboards and cellphones due to their small size and long term stability, most often in surface mount form. Tantalum electrolytic capacitors are also available in military specifications versions, which offer tighter tolerances and a wider operating temperature range. Medical electronics also rely on tantalum electrolytic capacitors



because of their high stability. Audio amplifiers sometimes use tantalum capacitors where stability is a critical factor. Tantalum capacitors are typically used in small electronic devices in which small size and high capacitance are required, such as smartphones, small personal computers and tablets and devices used by the defense, medicine, and oil and gas industries. Due to tantalum capacitors' small size and high capacitance, they are indispensable in the growing area of portable electronics. Figure 12 depicts the various shapes and applications of tantalum capacitors.

**Figure 12: Applications of Tantalum Electrolytic Capacitors**



Source: <http://www.kemet.com/Tantalum%20Capacitors>

140. It is important to note that although there are different types of capacitors, all types of capacitors have the same basic form and function. The surface area of the conductors, the distance between them, and the dielectric material may give each type of capacitor its characteristics and applications, but every type of capacitor is essentially a device used to store an electric charge, consisting of one or more pairs of conductors separated by an insulator.

141. The aluminum electrolytic capacitors market has annual global sales of over \$4 billion, while the tantalum electrolytic capacitors market has annual global sales of over \$1.5 billion.

142. While the inception of multi-layer ceramic capacitors (“MLCC”) have begun replacing more expensive electrolytic and film capacitors in some applications, capacitor manufactures cannot simply transition from one type of capacitor to another because circuit board designs require specific types of capacitors. As products and their circuit boards undergo redesign, however, MLCC will continue to replace electrolytic and film capacitors.



1           143. Between 2003 and 2013, almost all growth in capacitor sales has been attributable to  
2 ceramic capacitors due to the introduction of MLCC. The market share of ceramic capacitors rose  
3 from 85 to 90 percent, while the market shares fell from 10 to eight percent for aluminum  
4 capacitors and two to one percent for tantalum capacitors. Still, capacitor manufacturers could not  
5 simply switch from manufacturing electrolytic and/or film capacitors to manufacturing MLCC due  
6 to heavy, sunk financial investments in specialized facilities, complex equipment, and raw  
7 materials. As the increasing demand for ceramic capacitors decreased the demand for electrolytic  
8 and film capacitors, defendants conspired to fix the prices of the latter capacitors to maintain  
9 profits.

10           **F. Film Capacitors**

11           144. Film capacitors are electrostatic capacitors, which are distinct from electrolytic  
12 capacitors in that electrolytic capacitors are polarized capacitors while electrostatic capacitors on  
13 the other hand are non-polarized capacitors. Film capacitors are electrostatic capacitors with an  
14 plastic film or insulating paper as the dielectric. For plastic film capacitors, the dielectric plastic  
15 films, depending on the desired dielectric strength, are drawn in a special process to an extremely  
16 thin thickness. The process for creating super thin plastic films is highly sophisticated and difficult  
17 and expensive to develop or obtain the technology for such a process. Once the film reaches the  
18 desired width, it is cut into ribbons. The width of the ribbons impacts the capacitance of the  
19 capacitor being produced. Two ribbons of plastic film are wound together into a roll. Electrodes  
20 are later added by connecting each of the two electrodes to one of the films. Voltage is used to burn  
21 out any imperfections in the film. The case which holds the plastic film is sealed using silicon oil to  
22 protect the film roll against moistures, and then hermetically sealed. Film capacitors can also be  
23 made with paper being used as the dielectric. The plates of a film capacitor may be metallized  
24 aluminum or zinc applied directly to the surface of the plastic film, or a separate metallic foil  
25 overlying the film.

26           145. There are many types of film capacitors, including polyester film, metallized film,  
27 polypropylene film, polytetrafluoroethylene (“PTFE”) film and polystyrene film. The primary

1 difference between these types of film capacitors is the material used as the dielectric.

2       146. As electrostatic capacitors, film capacitors have properties that are distinct from  
3 electrolytic capacitors. In general, film capacitors have lower internal ohmic loss (“ESR”) and  
4 parasitic inductance (“ESL”) values. Film capacitors are generally physically larger and more  
5 expensive than electrolytic capacitors but have higher surge and pulse load capabilities. Film  
6 capacitors are larger than aluminum, tantalum and ceramic capacitors that share similar  
7 performance characteristics. As a result, film capacitors are poorly suited for miniaturized  
8 consumer electronics, such as modern smartphones and music players, which require surface-  
9 mounted capacitors with small form factors and high volumetric efficiency. With the market  
10 moving towards miniaturized consumer electronics, the demand for film capacitors has remained  
11 stagnant or shrunk.

12       147. Film capacitors are commonly used in electronic equipment and are used in many  
13 AC and DC microelectronics and electronics circuits. Film capacitors are reliable and can be  
14 developed for a wide range of different capacitance values. Film capacitors offer the advantages of  
15 stability of electrical values over sustained usage, reliability (low self-inductance and ESR), and  
16 low cost. The reliability and stability of film capacitors make them useful for many industrial  
17 applications and general-purpose applications in electronics.

18       **G. Capacitors Are Traceable Through the Chain of Distribution**

19       148. Electrolytic and film capacitors are component parts installed in electronic products  
20 as part of the electronic manufacturing process. They are also installed in electronic products to  
21 replace damaged, defective, or worn out capacitors. For new electronic products, tier one Original  
22 Equipment Manufacturers (“OEMs”)—the world’s largest electronic manufacturers, like Apple  
23 Inc., Hewlett-Packard Co., and IBM Corp.—directly purchase electrolytic and film capacitors from  
24 defendants due to their massive order volume. Plaintiffs and other OEMs—the rest of the world’s  
25 electronic manufacturers (*e.g.*, small businesses in Silicon Valley)—must indirectly purchase  
26 capacitors from a small number of distributors.

1           149. When purchasing capacitors for their electronic products, tier one OEMs either  
2 choose existing capacitors from defendants' catalogs or issue requests for quotations ("RFQs") for  
3 new capacitors to defendants. Defendants submit quotations or bids to OEMs in response to RFQs,  
4 and OEMs typically award the business to the selected defendant. Plaintiffs and other OEMs must  
5 purchase existing capacitors from distributors' catalogs.

6           150. Plaintiffs purchased electrolytic and film capacitors as a stand-alone product from  
7 distributors. When a capacitor is sold as a stand-alone product, the capacitor may be directly  
8 traceable to the specific manufacturer through the name, logo, and/or capacitor series printed on it  
9 that permits tracing. Some manufacturers print their name or logo on their capacitors, while others  
10 will only print the capacitor series. Indirect purchasers who purchase aluminum and tantalum  
11 capacitors from capacitor distributors can trace capacitors to their manufacturers.

12           151. As stated earlier in the Complaint, Plaintiffs purchased electrolytic and film  
13 capacitors as stand-alone products or as a component parts of electronic parts. Electrolytic and film  
14 capacitors are directly traceable to the specific manufacturer when purchased as stand-alone  
15 products. Electrolytic and film capacitors are discrete and identifiable component parts that pass  
16 through the chain of distribution in substantially the same form from defendants to consumers when  
17 purchased as part of electronic products. A capacitor is traceable to an entity owned and/or  
18 controlled by a defendant because it bears the defendant's markings (*e.g.*, name, logo, series).

## 19           **VII. FACTUAL ALLEGATIONS**

### 20           **A. Defendants Conspired to Unlawfully Fix and Artificially Raise the Prices of** 21           **Electrolytic and Film Capacitors**

22           152. The Hitachi, Nippon Chemi Con ("NCC"), Rubycon, and Panasonic defendants  
23 participated in *two conspiracies*: the *electrolytic capacitor cartel* from January 1, 2003 until such  
24 time as defendants' unlawful conduct ceased and the *film capacitor cartel* from January 1, 2007  
25 until such time as defendants' unlawful conduct ceased. The Elna, Matsuo, NEC TOKIN, and  
26 Nichicon defendants participated in the aforementioned *electrolytic capacitor cartel*. The Nissei,  
27 Nitsuko, Okaya, Shinyei, Soshin, Taitso, and Toshin Kogyo defendants participated in the

1   aforementioned *film capacitor cartel*. Defendants executed the electrolytic and film capacitors  
2   conspiracies as follows:

3                   **1.    Electrolytic Capacitor Conspiracy**

4           153.   Electrolytic capacitor cartel members engaged in both *group and bilateral*  
5   *discussions* involving electrolytic capacitors. Group discussions occurred at group meetings that  
6   began in 2003 and continued until at least 2011, though the information available to Plaintiffs  
7   strongly suggests the conspiracy continued beyond 2011. The initial purpose of the group meetings  
8   was for electrolytic capacitor manufacturers to discuss overall market demand and exchange past  
9   production data on a monthly basis. The group meetings, however, evolved into a forum for  
10   electrolytic capacitor manufacturers to discuss future production data, such as price, cost, volume,  
11   and profit. Bilateral discussions about specific prices for specific electrolytic capacitors occurred  
12   after such group meetings.

13                   **a.    Group Meetings and Discussions**

14           154.   Electrolytic capacitor cartel members attended the following group meetings:  
15   *Electrolytic Capacitor (ECC) meetings, Tantalum Capacitor (TC) meetings, and KCC/Hananoki*  
16   *meetings* from 1999 to 2003, *Aluminum Tantalum Capacitor (ATC) meetings* (also referred to as  
17   AT Statistics Group meetings) from 2003 through 2005, and *Marketing Study Group meetings*  
18   beginning in 2005.

19                   **i.    Pre-ATC Meetings**

20           155.   ECC meetings concerned electrolytic capacitors *without tantalum*. ECC meetings  
21   consisted of monthly meetings in Tokyo attended by mid-level managers to exchange information  
22   (though not related to prices or profits) and semi-annual meetings attended by high-level employees  
23   to share production data. Members anonymously submitted their data, which a third-party then  
24   collected and aggregated. Social events occasionally followed the semi-annual meetings. ECC  
25   meetings were the predecessor to the ATC meetings. The Elna, Nichicon, Nippon Chemi-Con  
26   (“NCC”), Rubycon, and SANYO defendants generally attended the ECC meetings.

156. TC meetings concerned electrolytic capacitors *with tantalum*. TC meetings were related to the ECC meetings and followed the same format as the ECC meetings. Members discussed increasing and maintaining prices at TC meetings. The Elna, FMD, Hitachi, Matsuo, NCC, NEC TOKIN, Rubycon, and SANYO defendants generally attended the TC meetings.

157. KCC/Hananoki meetings began in 1999 and were regional meetings focused on domestic sales of non-polymer electrolytic capacitors. KCC meetings were held in the Kansai region, whereas Hananoki meetings were held in the Nagoya region. The Elna, NCC, Nichicon, Rubycon, and Panasonic defendants generally attended the KCC/Hananoki meetings.

158. In addition to ECC, TC, and KCC/Hananoki meetings, electrolytic capacitor cartel members held other group meetings in Japan before establishing ATC meetings in 2003. Such meetings lacked an official name but were similar to industry gatherings or trade association meetings. These meetings began in the 1980s (if not earlier), continued through 2003, and focused on domestic sales of non-polymer aluminum electrolytic capacitors. Attendees exchanged demand and production data for the Japan market. The Elna, NCC, Nichicon, Panasonic, Rubycon defendants generally attended these other pre-ATC meetings. The ECC, TC, KCC/Hananoki, and other pre-ATC meetings laid the foundation for the ATC meetings which were conspiratorial in nature.

## ii. ATC Meetings

159. ATC meetings consisted of one-day monthly meetings in Tokyo attended by mid-level managers to exchange production volume and prices and two-day semi-annual meetings (in May/June and November) attended by high-level managers to exchange sensitive information on the first day and to participate in a social event (*e.g.*, golf at a resort) on the second day. The Elna, Nichicon, NCC, Rubycon, and SANYO defendants generally attended the ATC meetings. A Summer 2003 ATC Meeting Roster confirms that these defendants were members and lists each defendant's regular and associate members.

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1 reflect that “[r]egarding aluminum-wound conductive ones, *[Elna] estimates its price as it checks*  
2 *the prices of other companies.*”

3 164. Other e-mails from a SANYO employee to other personnel in late 2009 and early  
4 2010 contain tables of defendants’ reported increases and decreases in sales from the prior time  
5 period. Each e-mail cautions the recipients to “*please take utmost care in handling this report.*”

6 165. In a Summer 2010 e-mail from a SANYO employees to other employees, he wrote  
7 “to report market information.” Following that, he asked, “*Will this be my last time?*”, suggesting  
8 his awareness that these meetings were inappropriate.

9 166. Shimotsuki Kai (“November” in Japanese) meetings were annual or semi-annual  
10 meetings in November attended by high-level employees to exchange, discuss, and agree upon  
11 prices. High-level employees also discussed electrolytic capacitor demand using detailed statistical  
12 reports by third-parties on the demand for electronic products (*e.g.*, computers, cellphones, AV  
13 products). Electrolytic capacitor cartel members eventually hired Fuji Chimera Research Institute,  
14 Inc. to create similar reports for use at Shimotsuki Kai meetings.

15 167. The Elna, NEC TOKIN, NCC, and SANYO defendants were the first to attend the  
16 Marketing Study Group meetings. The FMD, Hitachi, Matsuo, and Rubycon defendants were the  
17 next to join such meetings. The Nichicon defendants joined such meetings in 2008 when it  
18 acquired FMD.

19 **b. Bilateral Meetings and Discussions**

20 168. There were bilateral meetings and discussions involving electrolytic capacitor cartel  
21 members during the Electrolytic Class Period, including those: (1) involving the NEC TOKIN and  
22 SANYO defendants from 2000 to 2013 regarding electrolytic capacitors sold to Apple Inc., Fujitsu,  
23 Ltd., Nokia Oyj, BlackBerry Ltd. (formerly known Research In Motion Ltd.), Toshiba Corp.,  
24 Samsung Electronics Co., Ltd., Sony Corp., many China/Taiwanese customers (*e.g.*, ASUSTeK  
25 Computer Inc., Comta, Foxconn Technology Group, Gigabyte Technology), and other Asia-based  
26 customers; (2) involving the FMD, NCC, and SANYO defendants from 2004 to 2007 regarding  
27 electrolytic capacitors sold to Dell Inc. and Intel Corp.; (3) involving the NCC and SANYO

defendants from 2000 to 2013 regarding electrolytic capacitors sold to Micro-Star Int'l Co., Ltd., Sharp Corp., Sony Corp., Toshiba Corp., and other Asia-based customers; (4) involving the Matsuo and SANYO defendants in or around April 2011 regarding electrolytic capacitors sold to HTC Corp.; and (5) irregular bilateral discussions involving SANYO defendants and AVX Corp., K-Net, Epcos AG, among others. The following e-mails are examples of bilateral discussions between defendants:

169. In a Summer 2007 e-mail, a SANYO employee stated, *“I have exchange information with [an employee] at NEC-TOKIN Taiwan and the details follow” (sic).*

170. In a Spring 2009 e-mail from a SANYO employee to other SANYO employees, he began with: *“Once you read this email, please delete it.”* The e-mail goes on to describe prices offered by SANYO to date and by an employee from NEC TOKIN who had many price discussions with SANYO. *Id.* *In the e-mail, the sender used “Company N” as a code name to refer to NEC TOKIN.* *Id.* The sender also admitted that he had stated, “[L]et’s share by two companies” (*sic*) with regard to pricing. *Id.*

171. *In the days prior to this e-mail, defendants sent multiple e-mails back and forth discussing and reaching price agreements (“understood... it will be 0.232, 0.165.”).*

172. In a Summer 2009 e-mail from a SANYO employee describing the “situation of N-company,” the sender prefaced the e-mail with a cautionary *“please discard this e-mail... I had a telephone call from [an employee], N.”* *Again, the sender used “N.” as a code name to refer to NEC TOKIN.* The e-mail stated that NEC TOKIN revealed the prices it would offer to Apple Inc., and in turn, SANYO revealed the prices that it would be offering to Apple Inc.

173. The following e-mails illustrate acts of coordination by defendants as they relate to electrolytic capacitors sold to Dell Inc. and Intel Corp.:

174. In a Winter 2006 e-mail from a SANYO employee with the subject *“OS-CON 3-company meeting,”* he described a discussion with FMD and possibly NCC. He indicated that *SANYO “agreed to increase the overall demand* by expanding the market for the flat TV



(LCD/plasma), but ***we will have to proceed by and between 2 companies***, as Fujitsu Media Devices does not have the V-chips capacity.”

175. In a Spring 2006 e-mail from a SANYO employee, he described his meeting with a FMD employee and an NCC employee to discuss how to collectively respond to pressure from Intel Corp. to lower prices. Another SANYO employee replied, “[Y]esterday and today, I had a word with NCC and FP respectively.” The reply further stated that ***“if we have to create a huge noise for this Intel matter, then Sanyo will also have to make a huge noise.”***

176. In a Spring 2006 e-mail from between SANYO employees, one of them stated that ***NCC disclosed their pricing to SANYO and has in turn asked “what Sanyo will do”*** with respect to polymer capacitor pricing. He further wrote, ***“I reported to [an employee] of NCC Taiwan over a call, and told him that Sanyo is also said the same thing (sic). Therefore, let us proceed while exchanging information so that we are not taken for a ride by customers.”*** Furthermore, “[I]t seems that he has conveyed my discussion with him to [an employee] as well. ***I think he understood that we have not proposed low prices.”***

177. In a Spring 2006 e-mail between an FMD employee and a SANYO employee, *the former admitted he “had a word with Chemi-con’s [employee] regarding Intel’s Addendum distributed today (sic).”* The FMD employee asked the SANYO employee ***to confirm SANYO’s capacitor pricing, warning him that “if we continue like this, prices will keep on declining. It would be a great help if you could give some ballpark figures for the above.”***

178. In Summer 2006, FMD, NCC, and SANYO met to discuss Intel Corp. and each company’s pricing strategy. For example, NCC instructed other defendants how to respond by stating that “aluminum is short, so ***set the target and raise the price (more than 10%)***” and ***“[i]f the price increase is not accepted, do not accept the share up.”***

### **c. Film Capacitor Conspiracy**

179. Film capacitor cartel members engaged in both ***group and bilateral discussions*** involving electrolytic capacitors. Group discussions occurred at group meetings that began in 1999 and continued until at least 2009. The initial purpose of the group meetings was for film capacitor

1 manufacturers to discuss film capacitor market trends and exchange film capacitor sales. The group  
2 meetings, however, evolved into a forum for film capacitor manufacturers to reach price agreements  
3 and talk about resisting price reductions. Bilateral discussions about film capacitors sold to Dell  
4 Inc., JMC Electronics Co., Ltd., and other customers in Japan and China markets occurred  
5 throughout this period.

6 **d. Group Meetings and Discussions**

7 180. Film capacitor cartel members attended the following group meetings: *Japan Film*  
8 *Capacitor (JFC) meetings* beginning in 2007, *Singapore meetings* beginning in 1999, *Kuala*  
9 *Lumpur (KL) meetings* beginning in 2004, and *FF meetings* beginning in 2008.

10 **i. JFC Meetings**

11 181. JFC meetings were formal meetings held every three months. Members contributed  
12 financially to operations. Members discussed new film capacitor products, exchanged production  
13 volume information, and talked about resisting price reduction requests from customers at such  
14 meetings, which were occasionally followed by social events. Members often shared price  
15 intentions that resulted in price agreements. From 2007 through 2009, members agreed upon price  
16 increases during periods of raw material cost increases. The Hitachi, NCC, Nissei, Nitsuko, Okaya,  
17 Panasonic, Rubycon, Shinyei, Soshin, Taitso, and Toshin Kogyo defendants generally attended the  
18 JFC meetings. The following documents illuminate the JFC meeting functions:

19 182. Winter 2008 notes by a Panasonic employee confirm these defendants attended a  
20 JFC meeting where they discussed increasing prices. Each defendant shared sales data and  
21 forecasts. At the conclusion of this meeting, the defendants agreed to partial price increases.

22 183. In Fall 2008, Panasonic created a chart title, “Status of Production of Other  
23 Companies,” that detailed pricing information for competitors, including Hitachi, Nissei, Nisuko,  
24 Okaya, Rubycon, Shinyei, Taitso, and Toshin Kogyo. The chart states that each defendant discussed  
25 negotiating for prices increases. At the bottom of the chart, Panasonic wrote, *“We decided to accept*  
26 *the film price hike effective on April 1.”*

1 **ii. Singapore Meetings**

2 184. Singapore meetings were meetings attended by Japanese companies with Singapore  
3 facilities from 1999 until at least 2009. From 1999 to 2004, the purpose of these meetings was to  
4 determine market trends by exchanging data for product sales in Southeast Asia. Companies also  
5 exchanged electronic product demand information to predict film capacitor demand. When a  
6 customer issued a RFQ for a film capacitor, companies would discuss responses. From 2005 to  
7 2009, the Singapore meetings occurred bimonthly, and attendees continued to exchange production  
8 and demand data. They also discussed price increases along with price reduction requests from  
9 customers, such as Sony Corp., Sharp Corp., Victor Company of Japan, Ltd. (JVC), Panasonic  
10 Corp., and Mitsumi Electric Co., Ltd. The Elna, NCC, Panasonic, and Rubycon defendants  
11 generally attended the Singapore meetings.

12 185. KL meetings concerned the Japanese electronics industry and occurred in Malaysia  
13 from 2004 to 2009. Sellers and purchasers of electronic components attended such meetings. FF  
14 meetings were the golf outings of KL meetings that occurred in Taiwan from 2008 to 2013. Such  
15 meetings presented additional opportunities for competitors to interact with each another off the  
16 record.

17 **e. Bilateral Meetings and Discussions**

18 186. There were bilateral meetings and discussions involving film capacitor cartel  
19 members during the Film Class Period, including those: (1) involving the NEC TOKIN, Panasonic,  
20 Rubycon, and United Chemi-Con, Inc. (“UCC”)<sup>8</sup> defendants from 2002 to 2013 regarding film  
21 capacitors sold to Dell Inc.<sup>9</sup>; and (2) involving Nissen and Panasonic defendants from 2007 to 2010  
22 regarding film capacitors sold in Japan and China markets, possibly to JMC Electronics Co., Ltd.  
23  
24

25 <sup>8</sup> UCC is a subsidiary of and wholly owned and/or controlled by its Japanese parent, NCC.

26 <sup>9</sup> The SANYO defendants, Taiyo Yuden Co., Ltd., and TDK Corp. were also involved these  
27 discussions, though Plaintiffs have not alleged that they participated in the film capacitor  
28 conspiracy.

187. Generally, in both electrolytic and film capacitor conspiracies, defendants' Japanese parent companies attended the conspiratorial meetings. Defendants' U.S. subsidiaries, however, also engaged in some bilateral discussions that included exchanges of sensitive information.

**B. Capacitor Industry Trends**

188. Consumer electronics is the largest end-use for capacitors and according to market analysts who specialize in the capacitors industry, consumer electronics constitute approximately 90% of the total market for capacitors. In 2014, the North and South American market for capacitors constituted approximately 12 percent of the overall global market for capacitors. The total dollar value of the North and South American markets for capacitors in 2014 was approximately \$2.2 billion. In North and South America, aluminum capacitors constitute approximately 17 percent of the total capacitor consumption, while tantalum capacitors constitute approximately 14 percent. Film capacitors constitute approximately 15 percent of the total capacitor consumption for both North and South America.

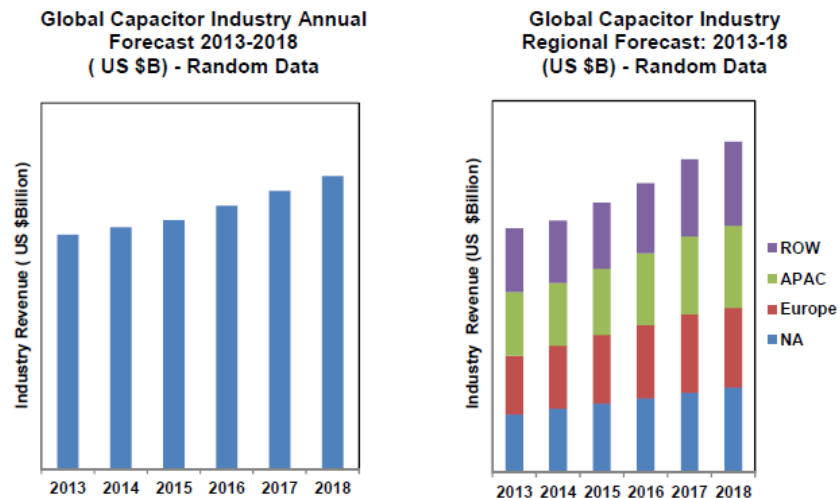
189. Leading market analysts in the capacitors industry have determined that overall global consumption of aluminum, tantalum and film capacitors has been declining for over a decade. Consumption of tantalum capacitors dropped from approximately 2.4 percent of global volume for fiscal year 2003 to an estimated 1.1 percent for 2014. Consumption of aluminum capacitors dropped from approximately 10.2 percent for fiscal year 2003 to an estimated 6.8 percent for fiscal year 2014. Consumption of film capacitors dropped from approximately 2.5 percent for fiscal year 2003 to an estimated 1.1 percent for fiscal year 2014.

190. Leading market analysts predict growth in the general capacitor market, however, which includes electrolytic and film capacitors. In 2013, global sales of capacitors exceeded 1.3 trillion units and global revenue for capacitors was more than \$16 billion. A report from Research and Markets, an industry research firm, forecasts that the *capacitor market will reach \$20.2 billion in revenue by 2018*. The report also predicts a 2.5 percent compound annual growth rate for capacitors worldwide, driven by overall electronic industry trends, including demand for compact, portable, and more complex electronic devices and the accompanying need for better, smaller, and

more efficient component solutions. The key forces driving growth in the capacitor market long term are the increasing demand for consumer electronics, such as notebooks, ultrabooks, and smartphones.

191. In fact, one report—Global Capacitor Industry 2013-2018: Trend, Profit, and Forecast Analysis—predicts that both industry revenue and industry revenue by region will increase steadily across the world, which was grouped into four regions: North America (“NA”), Europe, Asia-Pacific (“APAC”), and the rest of the world (“ROW”) (Figure 13).

**Figure 13: Global Capacitor Industry Revenue**



Source: Research and Markets

### **1. Aluminum Electrolytic Capacitors**

192. Aluminum electrolytic capacitors account for 6.5 percent of the global capacitor market in terms of volume but 22 percent of it in terms of dollar value. In North America, aluminum electrolytic capacitors are 20 percent of the \$1.5 billion annual market for capacitors, or \$300 million.

193. Currently, the largest end-use market for aluminum electrolytic capacitors is consumer electronics. However, demand from other end-use markets, such as medical instruments, defense, space and mining instruments, and electronic applications, is the leading source of growth in the aluminum electrolytic capacitor market. For example, the increasing demand for inverters,

1 which use aluminum electrolytic capacitors, in the energy and environmental industries is spurring  
2 growth in this market.

3 194. The aluminum capacitor market hit a low point in FY 2013. Market analysts believe  
4 that the market will rebound in the short-term because of a number and variety of markets that will  
5 drive the demand for aluminum capacitors, including commercial aircraft, communications  
6 infrastructure, electric rail, medical devices, and oil and gas industries. Market analysts also predict  
7 that the growth in global renewable energy markets—specifically, inverter applications in wind and  
8 solar energy will further increase the demand for aluminum capacitors. Although the demand for  
9 aluminum capacitors is expected to rebound from its lowest point in FY 2013, aluminum  
10 electrolytic manufacturers still faced and continue to face substantial market and technology  
11 headwinds that led to the creation of a price-fixing conspiracy.

## 12 2. Tantalum Electrolytic Capacitors

13 195. Multiple industries have continued to use tantalum for the past few decades due to its  
14 reliability despite the emergence of metal alternatives. Consumer electronics drove 50 to 70 percent  
15 of the demand for tantalum over the past 20 years. Tantalum capacitors are in cell phones, portable  
16 electronics equipment, and communications infrastructure.

17 196. In recent years, though, three tantalum-alternative capacitors have emerged as  
18 substitutes for tantalum capacitors: (1) multi-layered ceramic chip capacitors, (2) aluminum  
19 electrolytic capacitors, and (3) the niobium oxide molded chip capacitors. As such, the supply and  
20 demand for tantalum capacitors are expected to fall. These potential substitutes have impacted the  
21 profit margins of manufacturers of tantalum electrolytic capacitors, which necessitated the  
22 formation of a price-fixing conspiracy to protect those profit margins.

## 23 3. Film Capacitors

24 197. According to market researchers, the global market for paper and plastic film  
25 capacitors is forecast to reach USD\$2.6 billion by the year 2018. Film capacitors are used in  
26 automobiles, home appliances and products that enable greater connectivity and mobility such as  
27 mobile computing devices and smartphones. Improvements in metalizing techniques are enhancing

the efficient use of new ultra thin dielectric substrates. AC Film Capacitors, which are primarily used for heat pumps, awning drives, compressors, pumps, domestic appliances, air conditioning, and asynchronous motors represent the larger and faster growing market segment.

**C. The Characteristics of the Electrolytic and Film Capacitor Market Render Collusion More Plausible.**

198. The characteristics of the electrolytic and film capacitor industry in the United States are conducive to price-fixing and have rendered collusion plausible. Industry characteristics are critically important to determining the likelihood of collusion in that industry. Collusion is more plausible in industries where: (1) high barriers to entry exist; (2) demand is inelastic; (3) the market is highly concentrated; (4) the products are homogenous; (5) there are ample opportunities to conspire; (6) capacitor purchasers lack buying power; (7) demand is falling; and (8) there is a history of collusive behavior.

**1. The Electrolytic and Film Capacitor Industry Has High Barriers to Entry.**

199. The electrolytic and film capacitor industry has high barriers to entry that facilitate the formation and maintenance of a cartel. Collusion between manufacturers that effectively increases product prices above competitive levels would attract new entrants seeking to benefit from supra-competitive pricing. New entrants are less likely, however, where there are significant barriers to entry.

200. There are substantial barriers that preclude, reduce, or make more difficult entry into the electrolytic capacitor market. A potential new entrant faces costly and lengthy start-up costs, including multi-million dollar costs associated with research and development, manufacturing plants and equipment, energy, distribution infrastructure, skilled labor, and long-standing customer relationships with existing manufacturers.

201. Both electrolytic and film capacitors are expensive to manufacture. Aluminum electrolytic capacitors are generally more expensive than other capacitors (*e.g.*, ceramic capacitors, which are the most commonly manufactured capacitor in the electronics industry) due to the

1 numerous raw materials required, such as foil and paper, liquid or solid electrolyte, tab, can, leads,  
2 stoppers, and end seals. No other dielectric, except perhaps film capacitors, has so many different  
3 raw materials and required disciplines to produce the finished capacitor. Tantalum electrolytic  
4 capacitors are also considerably more expensive than any other commonly used type of capacitor  
5 because tantalum is a rare element of erratic supply with high demand.

6         202.         Film capacitors require advanced technology needed to manufacture the different  
7 components, including the super thin dielectric plastic film. Special equipment is also required to  
8 manufacture film capacitors, which would impact the ability of new companies to enter the market.  
9 In order to compete, new entrants would need access to equally efficient production technology as  
10 established firms. The cost of obtaining or developing such production technology is extremely  
11 high. Furthermore, film capacitors have become increasingly more difficult to produce because  
12 manufacturers have encountered greater difficulty in securing the necessary input materials.  
13 Because of the high volume of plastic film material needed for a production run of film capacitors,  
14 it is generally not profitable for chemical companies to manufacture the plastics. As a result, five  
15 types of plastic material now account for over 90% of film capacitor dielectrics: polypropylene,  
16 polyester, polyphenylene sulfide, polyethylene naphthalate, and PTFE. A limited number of  
17 dielectric grade resin manufacturers control the global production of these plastics (*e.g.*, principally  
18 DuPont, Teijin, Toray, Mitsui, and Borealis) and they make them in large batches only a few times  
19 a year. Likewise, the converters who apply special conductive coatings to the resin usually only run  
20 large batches a few times a year, and for some specialty film coatings, batches are run only once a  
21 year. New entrants would lack the market or economic power to gain access to the inputs needed at  
22 a low enough cost to effectively compete with the defendants and other established market  
23 participants.

24         203.         Electrolytic and film capacitors are protected by patents. Patents provide a firm the  
25 legal right to stop other firms producing a product for a given period of time, restricting entry into a  
26 market. According to the United States Patent and Trademark Office, defendants own hundreds of  
27 active patents for various capacitors. For example, Panasonic and NEC TOKIN each have about



1 100 capacitor patents. One capacitor manufacturer acknowledged that patents present a barrier to  
2 entering the capacitors market. Non-defendant Maxwell Technologies attributes its “technology  
3 leadership” to its “investments in research and development . . . protected by more than 100 issued  
4 U.S. patents and pending patent applications.” Patents place a significant and costly burden on new  
5 entrants, which must avoid infringing on patents when entering the electrolytic capacitor market.

6 204. In addition, given the nature of the materials used in capacitors, any new entrant  
7 must comply with various environmental regulations in whatever jurisdiction where a plant is built.  
8 Compliance with such regulations requires extensive testing and obtaining government approval, all  
9 of which can take many years. These issues are particularly problematic for tantalum capacitors,  
10 for which its key ingredient, tantalite, is often sourced from conflict zones. Under U.S. law,  
11 tantalum is a “conflict mineral” and therefore, there are substantial regulatory issues regarding the  
12 mining and sale of tantalum, which is the essential component in tantalum electrolytic capacitors

13 205. For instance, in connection with its recent acquisition of NEC TOKIN, KEMET  
14 reported, “In the short period since receiving regulatory approval and closing the transaction, we  
15 signed and began the execution of both a Private Label Agreement and a Development and Cross-  
16 Licensing Agreement so that we can take advantage of both KEMET and NEC TOKIN’s  
17 extraordinary synergies. These agreements expand market and product offerings for both  
18 companies and allow us to achieve true scale in operations to manage raw material sourcing, as well  
19 as maximize efficiencies and best practices in manufacturing and product development.”

20 206. KEMET noted in its 2013 Annual Report that “[a] majority of [KEMET’s] tantalum  
21 needs are now met through our direct sourcing of conflict free tantalum ore or tantalum scrap  
22 reclaim, which is then processed into the intermediate product potassium heptafluorotantalate  
23 (commonly known as K-salt) at [KEMET’s] own facility in Mexico or at a subcontractor site in  
24 South Africa, before final processing into tantalum powder at Blue Powder.” It would be nearly  
25 impossible for a new entrant to have the political and economic power to obtain the same access to  
26 raw materials that established companies possess in order to compete successfully with them.

27

28

1           207. In connection with its recent acquisition of NEC TOKIN, KEMET reported, “In the  
2 short period since receiving regulatory approval and closing the transaction, we signed and began  
3 the execution of both a Private Label Agreement and a Development and Cross-Licensing  
4 Agreement so that we can take advantage of both KEMET and NEC TOKIN’s extraordinary  
5 synergies. These agreements expand market and product offerings for both companies and allow us  
6 to achieve true scale in operations to manage raw material sourcing, as well as maximize  
7 efficiencies and best practices in manufacturing and product development.” Again, established  
8 firms have built up an infrastructure that are essentially cost prohibitive to new entrants.

9           208. One industry expert described the barriers to entry in the capacitor market as high,  
10 especially for tantalum capacitors. The production technology required for this sub-type,  
11 particularly stacking, metallization, firing and creating anodes, is expensive and difficult to master.

12           209. AVX noted in its 2013 Annual Report that its February 2013 acquisition of  
13 Nichicon’s Tantalum Components Division “add[ed] the capabilities of the production facilities,”  
14 “g[ave] [AVX] a larger presence in the smartphone product sector,” and “with AVX’s tantalum  
15 material purchasing leverage, . . . the integration and profitability of these operations can quickly  
16 become beneficial.”

## 17                           **2. The Demand for Electrolytic and Film Capacitors Is Inelastic.**

18           210. “Elasticity” is a term used to describe the sensitivity of supply and demand to  
19 changes in one or the other. For example, demand is said to be “inelastic” if an increase in the price  
20 of a product results in only a small decline in the quantity sold of that product, if any. In other  
21 words, customers have nowhere to turn for alternative, cheaper products of similar quality, and so  
22 continue to purchase despite a price increase.

23           211. For a cartel to profit from raising prices above competitive levels, demand must be  
24 relatively inelastic at competitive prices. Otherwise, increased prices would result in declining  
25 sales, revenues, and profits, as customers purchased substitute products or declined to buy  
26 altogether. Inelastic demand is a market characteristic that facilitates collusion, allowing producers  
27 to raise their prices without triggering customer substitution and lost sales revenue.

1           212. Demand for capacitors is highly inelastic because there are no close substitutes for  
2 these products. The demand for capacitors will continue to rise due to increasing use of PCs,  
3 notebooks, ultrabooks, smartphones, and other consumer and electronic products that meet basic  
4 requirements in day-to-day life. No other type of passive electrical component (*e.g.*, inductors and  
5 resistors) can serve as a substitute or a functional equivalent to a capacitor in an electric circuit.  
6 Accordingly, a purchaser that is either an OEM or an Electronic Manufacturing Services (“EMS”)  
7 Provider cannot design quickly an electric circuit to bypass its need for a capacitor with a certain  
8 capacitance, dielectric and form factor.

9           213. Demand for capacitors by sub-type (*e.g.*, electrolytic and film) is also inelastic  
10 because electronics are designed specifically for a specific type of capacitor of a specific level of  
11 capacitance. For instance, tantalum capacitors are desired for their small size and high capacitance,  
12 particularly for use in small electronics, such as mobile phones, smart phones and tablet computers.  
13 They cannot be easily replaced by other capacitors that do not have these features. Although  
14 ceramic capacitors are cheaper than tantalum capacitors, due to differences in size and capacitance  
15 values, they cannot immediately replace circuits that use tantalum or other capacitors. Similarly,  
16 film capacitors have different characteristics, such as lower ESR and ESL values than electrolytic  
17 capacitors that make them better suited for certain functions. For example, because film capacitors  
18 are not polarized, they can be used in certain applications that electrolytic capacitors cannot.  
19 Substituting one sub-type of capacitor for another would require redesigning and reengineering a  
20 product’s electrical circuits, a process that cannot be accomplished quickly. Depending on the  
21 electronic product at issue, it may not even be possible to redesign or reengineer the product given  
22 the capacitance needs of the product at issue. Thus, purchasers of capacitors have no choice but to  
23 purchase the specific type of capacitor for which their products were designed.

24                   **3. The Electrolytic and Film Capacitor Industry Is Highly Concentrated.**

25           214. Market concentration facilitates collusion. Collusive agreements are easier to  
26 implement and sustain when there are few firms controlling a large portion of the market. Practical  
27 matters such as coordinating cartel meetings and exchanging information are much simpler with a

1 small number of players. If the participants can coordinate pricing decisions, their control over  
2 total industry output may result in prices that are elevated across the industry. Moreover, their high  
3 degree of control also simplifies their coordination issues because there is little outside competitive  
4 presence to undermine the cartel. With fewer firms in the market, the transitory bump in profits  
5 that could be achieved by undercutting the cartel price and gaining a transitory increase in market  
6 share would be outweighed by the greater long-term market share for a colluding firm in a  
7 concentrated industry.

8         215. By contrast, if an industry is divided into a large number of small firms, the  
9 current gain from cheating on a cartel (profits from sales captured from other cartel members  
10 through undercutting of the cartel-fixed price in the current time period, which risks causing the  
11 cartel to fall apart in the future) is large relative to the firm's possible gains from the cartel's  
12 continuing future success (the firm's future share of the total cartel profits if collusion were to  
13 continue successfully).

14         216. The electrolytic and film capacitors markets are amongst the two most concentrated  
15 submarkets of the overall capacitors market, with a handful of companies dominating the aluminum  
16 electrolytic capacitor market and another handful dominating the tantalum electrolytic capacitors  
17 market. These companies are also geographically centralized, making collusion easy to accomplish.  
18 The nine companies under investigation are believed to have secured illegal and unlawful profits by  
19 uniformly passing the increases in material procurement costs through to product prices, citing  
20 shrinking demand after the collapse of Lehman Brothers in 2008 as well as the rising costs of  
21 aluminum and tantalum after the 2008 economic crisis.

22         217. As the electrolytic and film capacitor markets are dominated by a few companies  
23 who control the lion's share of these markets, the continuing agreements, understandings,  
24 combinations or conspiracies to fix, raise, maintain and/or stabilize prices, and to allocate market  
25 shares for electrolytic and film capacitors are effective at setting the prices of electrolytic and film  
26 capacitors at artificially high, supra-competitive prices.

1           218. A concentrated market is more susceptible to collusion and other anticompetitive  
2 practices. The electrolytic and film capacitor market were concentrated during the respective Class  
3 Periods. In fact, throughout the Class Period, defendants collectively maintained high market  
4 shares. Defendants used acquisitions to further reduce the number of capacitor manufacturers in the  
5 world.

6                   **4. Electrolytic and Film Capacitors Are Homogenous and Commoditized**  
7                   **Products.**

8           219. Electrolytic and film capacitors are homogenous products or commodities because  
9 their characteristics and qualities are essentially uniform across different manufacturers. Although  
10 different sub-types of capacitors are not interchangeable, within each category, capacitors are  
11 designed to be interchangeable. Homogenous products enhance collusion because they enable  
12 manufacturers to more easily negotiate agreement on prices and/or quantities and facilitate  
13 monitoring.

14           220. The homogenization of capacitors is aided by industry-standard product  
15 specifications. The principal dimensions of product differentiation in capacitors are well known  
16 and easily quantifiable. Indeed, manufacturers and distributors maintain very detailed product  
17 catalogs and substitution guides that outline rules for swapping out capacitors made by other  
18 defendants based on their common characteristics.

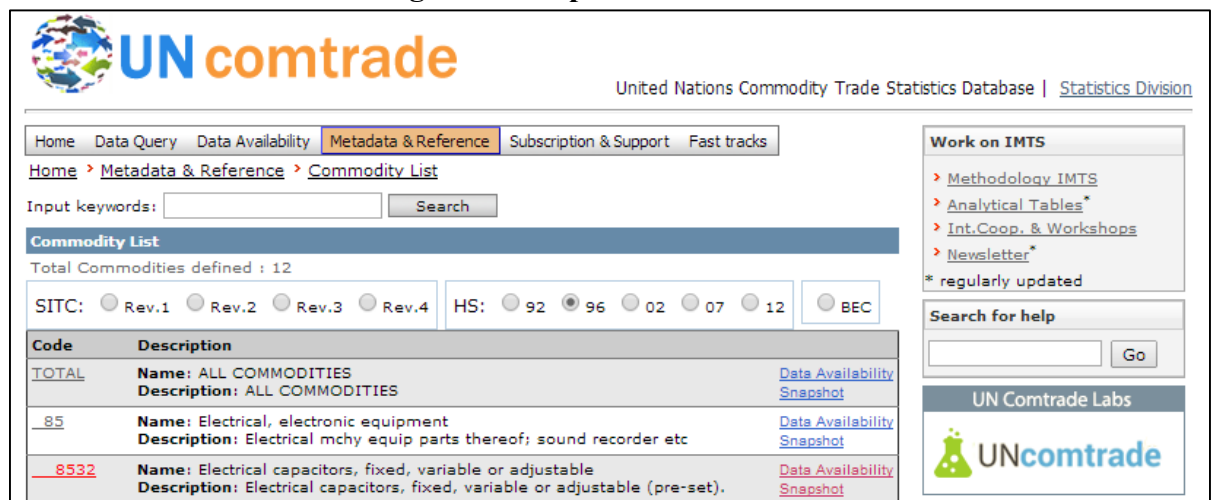
19           221. In economics, a commodity is a basic good used in commerce that is interchangeable  
20 with other commodities of the same type. Commodities are most often used as inputs in the  
21 production of other goods or services. Product homogeneity facilitates collusion more than product  
22 differentiation. Examples of traditional commodities are sugar, wheat, and rubber. Examples of  
23 emerging commodities are wind and solar power and greenhouse gas offsets, for which the market  
24 is developing but not yet mature. As technologies and markets for a good mature, it is more likely  
25 to be considered a commodity, at least in its more basic implementations.

26           222. Electrolytic and film capacitors straddle the line between traditional commodities  
27 and emerging commodities because the capacitor market has not reached maturity yet and is still  
28 developing. As capacitors are in almost every electronic device—and as the electronic device

market is expanding due to the exponential growth in computing technology per Moore's Law<sup>10</sup>—the established electrolytic and film capacitor markets are still evolving.

223. The United Nations ("UN") Commodity Trade Statistics Database, the largest depository of international trade data, includes electrical capacitors, which encompass electrolytic and film capacitors, on its Commodity List (Figure 14). Over 170 reporter countries provide the UN Statistics Division with their annual international trade statistics data detailed by commodities and partner countries. The UN and UN member countries therefore consider capacitors as commodities.

**Figure 14: Capacitors Are Commodities.**



The screenshot shows the UN Comtrade website interface. At the top, there's a navigation bar with links: Home, Data Query, Data Availability, Metadata & Reference (highlighted), Subscription & Support, and Fast tracks. Below this is a breadcrumb trail: Home > Metadata & Reference > Commodity List. A search bar with the text 'Input keywords:' and a 'Search' button is present. The main section is titled 'Commodity List' and shows 'Total Commodities defined : 12'. Below this, there are filters for SITC (Rev. 1, Rev. 2, Rev. 3, Rev. 4) and HS (92, 96, 02, 07, 12, BEC). A table lists commodities with columns for Code, Description, Name, and Data Availability/Snapshot. The table shows three entries: 'TOTAL' (ALL COMMODITIES), '85' (Electrical, electronic equipment), and '8532' (Electrical capacitors, fixed, variable or adjustable). The '8532' entry is highlighted in red. On the right side, there's a 'Work on IMTS' section with links to Methodology IMTS, Analytical Tables\*, Int.Coop. & Workshops, and Newsletter\*. Below this is a 'Search for help' section with a search bar and a 'Go' button. At the bottom right, there's a 'UN Comtrade Labs' section with the UN Comtrade logo.

Code	Description	Name	Description	Data Availability
TOTAL		ALL COMMODITIES	ALL COMMODITIES	<a href="#">Data Availability</a> <a href="#">Snapshot</a>
85		Electrical, electronic equipment	Electrical mchy equip parts thereof; sound recorder etc	<a href="#">Data Availability</a> <a href="#">Snapshot</a>
8532		Electrical capacitors, fixed, variable or adjustable	Electrical capacitors, fixed, variable or adjustable (pre-set).	<a href="#">Data Availability</a> <a href="#">Snapshot</a>

Source: <http://comtrade.un.org/db/mr/rfCommoditiesList.aspx?px=H1&cc=8532>

224. Further, according to some market analysts, the ubiquity of smartphones and the consistency of features from one brand to another means that the products are becoming commodities. The commoditization of smartphones has increased the commoditization of capacitors.

225. Markets for commodity products are conducive to collusion. Typically, when a product is characterized as a commodity, competition is based principally on price, as opposed to other attributes such as product quality or customer service. This factor facilitates coordination

<sup>10</sup> Moore's Law states that processor speeds, or overall processing power for computers will double approximately every two years.

1 because firms wishing to form a cartel can more easily monitor and detect defections from a price-  
2 fixing agreement where any observed differences in prices are more likely to reflect cheating on the  
3 conspiracy than any other factor which might affect pricing, such as special product characteristics,  
4 service or other aspects of the transaction.

5 226. As electrolytic and film capacitors are commodities, price is the most obvious  
6 differentiation among them for purchasers. In a market of this nature, with trillions of components  
7 being manufactured and sold a year at relatively inexpensive individual prices, there is a huge  
8 incentive to fix, stabilize, maintain and raise the prices of the components to supra-competitive  
9 levels through illegal conspiratorial agreements. By foregoing competition, each manufacturer  
10 could still guarantee themselves massive profits in such a high volume market. This  
11 anticompetitive conspiracy causes substantial harm to consumers, to competition, and to United  
12 States commerce.

13 **5. Defendants Had Ample Opportunities to Conspire.**

14 227. Trade associations provided opportunities for defendants to meet frequently and  
15 exchange information to facilitate collusion. Defendants are members of a number of trade  
16 associations in the United States, Asia and Europe. Their overlapping membership in various trade  
17 associations also provided incentive for cartel members to stay within the illegally agreed upon  
18 price framework, as they could monitor one another's activities in the capacitor market and punish  
19 non-compliance. Defendants' participation in trade associations, as described above, helped  
20 facilitate their collusion.

21 228. Defendants attended industry events where they had the opportunity to meet, have  
22 improper discussions under the guise of legitimate business contacts, and perform acts necessary for  
23 the operation and furtherance of the conspiracy. For example, defendants NEC TOKIN, Nippon  
24 Chemi-Con, Panasonic, and their co-conspirators have regularly attended meetings worldwide,  
25 including the World Electronics Forum, International Information Industry Conference and World  
26 Semiconductor Council.

229. Trade associations and other common forums facilitated defendants' collusion. Trade association meetings provide an excellent cover for meeting and communicating about the pricing of electrolytic and film capacitors and to conspire to fix, raise, maintain and/or stabilize prices, and to allocate market shares for electrolytic and/or film capacitors.

230. **World Capacitor Trade Statistics Meeting:** The World Capacitor Trade Statistics Meeting is a worldwide information exchange meeting held every two years, and defendants who have attended these meetings include NCC, Nissei, and Panasonic. During these meetings, groups around the world gather aggregate statistics for their countries and submit the statistics to the world meeting. The U.S. group of the meeting was called The Components Group of the EIA (EICA).

231. A Panasonic employee attended this meeting in Spring 2012, where participants supplied monthly statistics to the group and numbers were regionally reported on a quarterly basis. Another Panasonic attended the meeting in 2007 and 2008, and was a member of a capacitors working group. The group met every three months and exchanged information on the capacitor business.

232. **Japan Electronics and Information Technology Industries Association (JEITA)-Related Meetings:** Defendants NEC Corp., Nippon Chemi-Con, and Panasonic are members of the Japan Electronics and Information Technology Industries Association ("JEITA"), a Japanese trade association for the electronics and information technology industries.

233. Defendants' executives held key leadership positions within JEITA. JEITA's directors include NEC, Nippon Chemi-Con, and Panasonic executives. Presidents and Chief Executive Officers ("CEO") of defendants Nippon Chemi-Con and Nichicon hold officer positions in JEITA's Electronic Components Group Subcommittee. The President and CEO of defendant Nippon Chemi-Con, Ikuo Uchiyama, is currently the Chairman of the Subcommittee's Policy Steering Committee. The President and CEO of defendant Nichicon, Shigeo Yoshida, is currently the Chairman of the Subcommittee's Technology and Standard Strategy Committee.

234. Defendants Panasonic, Hitachi Chemical, NEC TOKIN, Nichicon, Nippon Chemi-Con, and Rubycon, met regularly under the auspices of JEITA to exchange sensitive market



1 information. Additionally, all JEITA members gather annually for a conference that serves as the  
2 industry's premier decision-making forum.

3 235. The JEITA was established in 2000 through the merger of two trade associations, the  
4 Electronic Industries Association of Japan and the Japan Electronic Industries Development  
5 Association. The objective of JEITA is to promote the wellbeing of Japanese electronics  
6 companies, including those that make capacitors. JEITA members gather annually for a conference  
7 that is described by the organizers as the "industry's premier decision-making forum." The stated  
8 goals of JEITA include:

9 (a) "Collecting, organizing and analyzing statistics from within and outside of the  
10 industry";

11 (b) "Publishing and distributing reports and reference materials on trends in and  
12 analyses of the industry, production forecasts, technological trends in a variety of fields, and mid- to  
13 long-range projections";

14 (c) "Exchanging statistics and information with trade associations in other countries";  
15 and

16 (d) "Improving understanding of the status of electronics and information technology  
17 industries worldwide through the dispatching of study missions and other activities."

18 236. JEITA's activities include "promoting international cooperation" and "implementing  
19 surveys and analyzing statistics." Specifically, JEITA interacts with overseas trade associations by  
20 arranging and participating in international conferences and related events; releases industry-related  
21 information globally; collects, organizes, and analyzes statistics from within and outside of the  
22 industry; publishes and distributes reports and reference materials on trends in, and analyses of, the  
23 industry, production forecasts, technological trends in a variety of fields, and mid- to long-range  
24 projections; and exchanges statistics and information with trade associations in other countries.

25 237. Defendants NEC Corp., Nippon Chemi-Con, and Panasonic employed the JEITA  
26 and its affiliated and related organizations to exchange prices and other sensitive business data,  
27 encouraging more uniform prices than otherwise would exist in the capacitor market. Specifically,

1 these defendants used the JEITA to facilitate price increases for capacitors and prevent new entrants  
2 into the capacitor market.

3       **238. Japan Electronics Shows Association (“JESA”):** Defendants Panasonic, NEC  
4 TOKIN, Nippon Chemi-Con, and Nichicon, and non-defendant Taiyo Yuden are members of JESA,  
5 based in Tokyo, Japan. JESA promotes and operates trade shows that have been organized by  
6 JEITA. Defendants’ executives hold leadership positions within JEITA. The Chairman of  
7 defendant Panasonic, Shusaku Nagae, is an Executive Director of JESA. Similarly, the Chairman  
8 of the Board of defendant NEC Corp., Kaoru Yano, is an Executive Director in JESA. JESA puts  
9 on several trade shows each year, including the Cutting-edge IT & Electronics Comprehensive  
10 Exhibition (CEATEC Japan), the International Broadcast Equipment Exhibits (Inter BEE) and the  
11 Electronic Design and Solution Fair (EDSFair). JESA’s organizing activities prior to these trade  
12 shows, and the shows themselves, provide defendants ample opportunity to exchange information  
13 and fix artificial prices.

14       **239. European Industry Meetings:** Defendants attended numerous different European  
15 industry meetings (ZVI Meetings) during which information regarding trends and raw material  
16 costs was exchanged. These meetings, which provided opportunity for direct competitor contact,  
17 are currently the subject of investigation by European antitrust authorities. Defendants also attended  
18 meetings called ADER Meetings, during which defendants shared information regarding lead times,  
19 pricing, and price trends. The European Union antitrust authorities are investigating these meetings  
20 as well.

21       **240.** Defendants Panasonic and Nichicon are members of European Passive Components  
22 Industry Association (“EPCIA”) based in Brussels, Belgium. The goal of the EPCIA is to “promote  
23 the common interests of the Passive Components Manufacturers” in Europe, including aluminum  
24 and tantalum capacitors. The EPCIA gathers at least once annually to:

25       (e) “Provide members and Institutions with general market data for the Passive  
26 Components Industry in Europe as well as forecasts and ‘Management overviews’ on economies,  
27 markets, production values and labor forces in Europe”;

1 (f) “Facilitate the exchange of data with neighboring component sectors like  
2 Semiconductors, Electro-mechanics, Printed circuit boards, etc.”;

3 (g) “Organize Meetings and Forums on important issues of the Passive Components  
4 Industry”; and

5 (h) “Facilitate worldwide networking between Passives Component Manufacturers at  
6 expert / management level.”

7 241. **Technology Group:** Defendants Panasonic and SANYO were both part of a  
8 technology group called the Functional Macros Molecular Capacitor Research Meeting, providing  
9 yet another opportunity for defendants to exchange information. Panasonic began attending in 2008  
10 and SANYO began in 2011.

11 242. **TIC Group:** Defendants also attended meetings held by the Tantalum Niobium  
12 International Studies Center (TIC Group). The TIC Group handles products that use tantalum and  
13 niobium, including capacitors. During these meetings, defendants exchanged industry information  
14 about products, including the availability of tantalum. Defendant SANYO attended these meetings  
15 through 2008.

16 243. There are also industry news sources that defendants can use to monitor compliance  
17 with the conspiracy. For example, Capacitor Industry News is an industry website that provides  
18 industry news, information about trends in the capacitor industry, and technical specifications about  
19 different types of capacitors being manufactured, including those being manufactured by the  
20 defendants. This exchange of information allows defendants to share information about their  
21 products and prices to both maintain the conspiracy but also to monitor the cartel members and  
22 ensure that all of them are complying with the terms of the illegal agreement.

23 **6. Indirect Purchasers of Capacitors Lacked Buying Power.**

24 244. Standard economics holds that when there are many buyers in a market for a  
25 particular good, that good is more susceptible to effective cartel behavior. The incentive for cartel  
26 members to undercut the conspiracy is lower when there are many smaller purchasers because  
27 while each potential sale is small, disrupting the cartel can carry large penalties. A cartel member,  
28

1 thus, is incentivized to avoid the collapse of the entire price-setting agreement, and the loss of the  
2 supra-competitive profits on all sales in that market when there are many buyers. Conversely, a  
3 cartel's ability to raise prices can be thwarted in markets where buyers have significant negotiating  
4 power with sellers.

5 245. Capacitor manufacturers sell their products to companies in audio-visual,  
6 communications, computers, peripherals, and home electronics businesses. The largest consumer  
7 of capacitors is the telecommunications industry (38 percent), followed by the Computers and  
8 Consumer Audio-Video industries.

9 246. Direct purchasers of capacitors are generally distributors. OEMs and EMS providers  
10 that make equipment for OEMs generally buy capacitors from distributors. Therefore, indirect  
11 purchasers in the capacitor market lacked substantial buying power. For example, AVX states in its  
12 2013 Annual Report that "[d]uring the fiscal year ended March 31, 2014, no single customer  
13 accounted for more than 10% of our sales."

14 247. Direct purchasers of capacitors are generally distributors. Except for a few tier 1  
15 OEMs, most OEMs and EMS providers that make equipment for OEMs generally buy capacitors  
16 from distributors. There are very few large OEMs who possess buying power and as to those  
17 companies, defendants were motivated conspire amongst themselves to keep bid prices high to  
18 avoid cutthroat price competition that would harm them all. For example, AVX states in its 2013  
19 Annual Report that "[d]uring the fiscal year ended March 31, 2014, no single customer accounted  
20 for more than 10% of our sales." Large numbers of buyers with little buying power was the general  
21 rule in the capacitors industry.

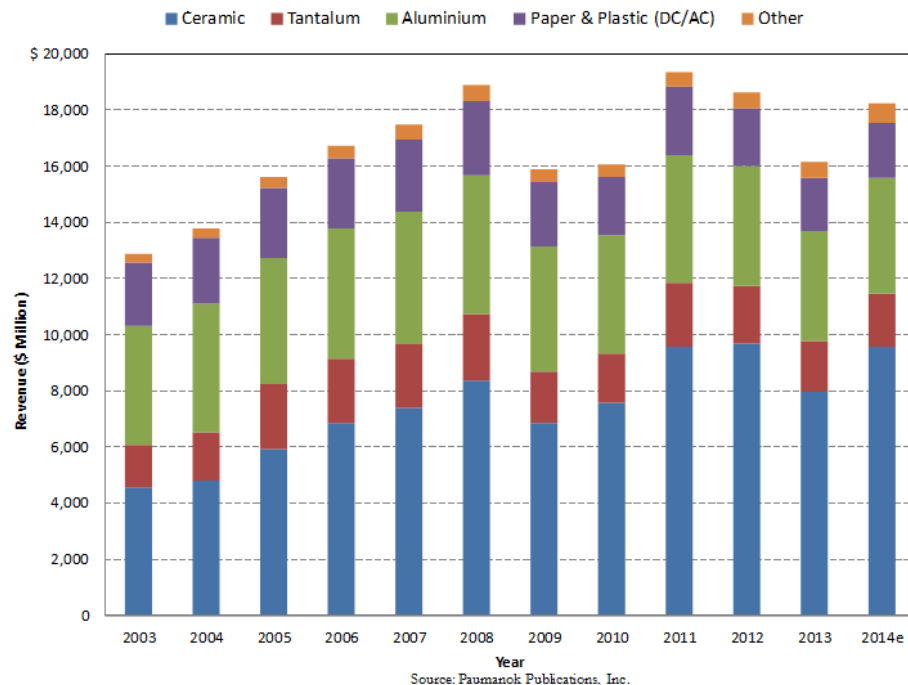
22 248. As set forth above, buyers in the capacitor market lacked buying power. Since there  
23 were many purchasers of capacitors, it would have been easier to form and maintain the cartel. This  
24 is true because a large number of buyers would have made it less likely that defendant  
25 manufacturers would have cheated on the agreement to artificially inflate prices, because the loss of  
26 supra-competitive profits on their sales of capacitors outweighed the potential additional profits of  
27 raising sales to a handful of modestly-sized customers.

## 7. Falling Demand for Capacitors Over Time.

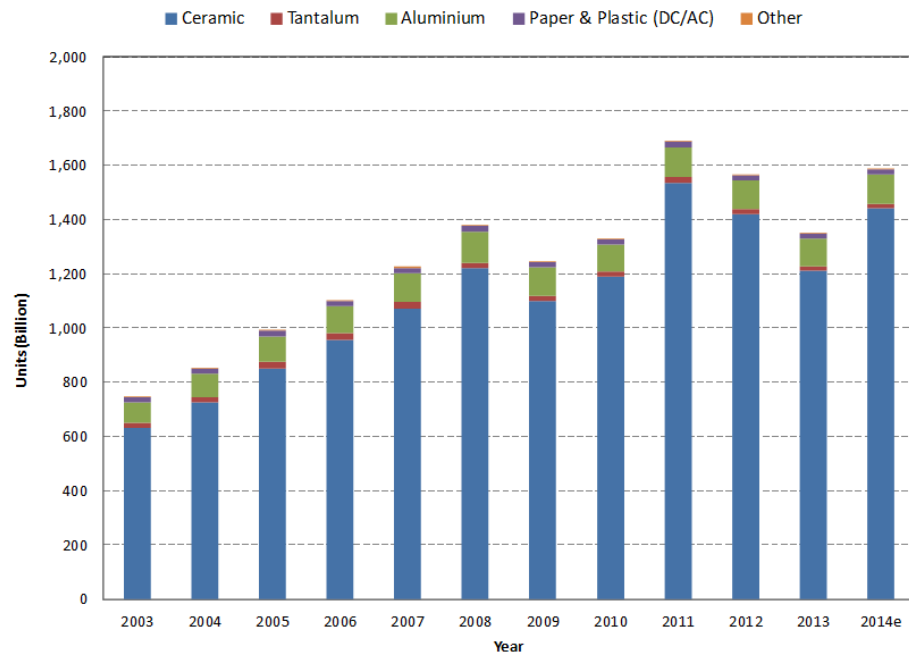
249. Because capacitors are indispensable components in consumer electronics, the market for capacitors is very large. In 2013, the size of global capacitor industry overall was estimated at just over \$16 billion.

250. Despite this large market, defendants have faced declining demand and profits from capacitor sales. As shown in Figures 15 and 16 below, the economic downturn of 2008 and 2009 negatively impacted the capacitor market. Global revenues fell by 16 percent in 2009 relative to the year before. The market recovered in 2011, but sales slipped again in 2013.

**Figure 15: Global Capacitor Market Revenue**



**Figure 16: Global Capacitor Shipments**



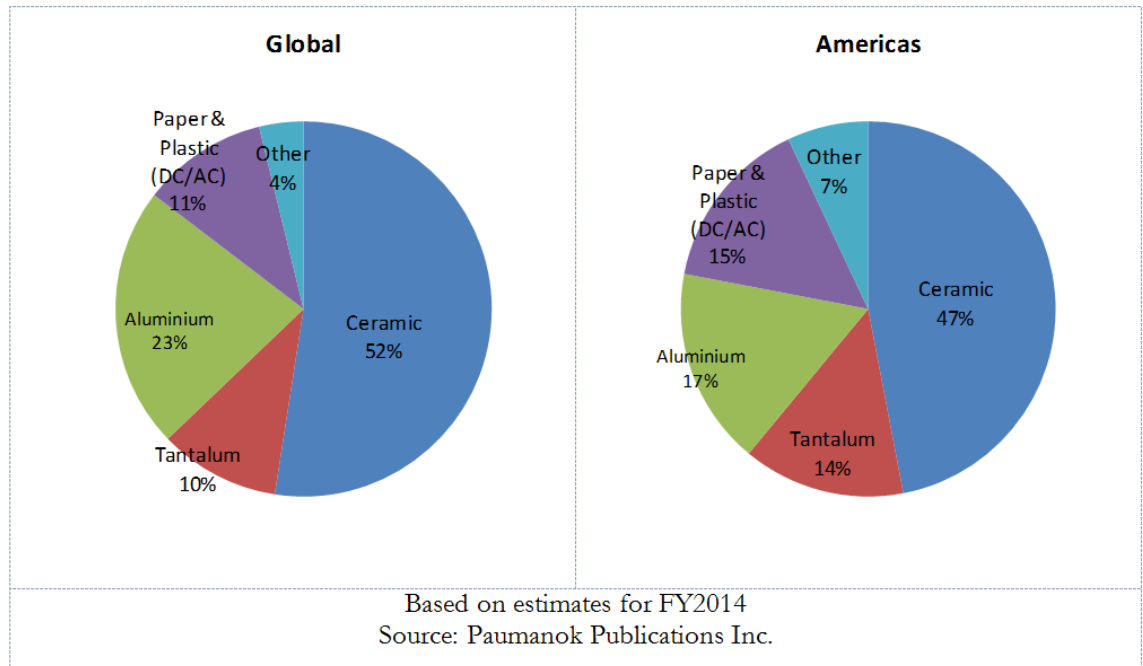
Source: Paumanok Publications, Inc.

251. For aluminum capacitors, global annual revenues fell by about 8 percent from 2012 to 2013. For tantalum capacitors, global annual revenue fell by about 11.5 percent from 2012 to 2013.

**a. Demand for Capacitors in the Americas**

252. The Americas market (led by the United States and Mexico) accounts for a significant portion of the global capacitor market. It is currently estimated at about \$2.3 billion, down from \$2.6 billion in 2007. The Americas therefore account for about 12 percent of the global market at present. The demand in the Americas market for different capacitor types is roughly the same as global demand, although tantalum and film capacitors account for a somewhat larger share of the Americas market relative to the global market, as shown in Figure 17. About 17 percent of capacitor consumption in the Americas market is for aluminum capacitors and 14 percent is for tantalum capacitors.

**Figure 17: Capacitor Consumption Globally and in the Americas**



#### b. Demand for Capacitors Over Time

253. In the 2000s, there was a gradual shift in favor of ceramic capacitors. The major technological development that led to this shift towards ceramic capacitors was the development of multi-layer ceramic capacitors (“MLCC”). MLCCs are the most produced capacitors with a quantity of approximately 1 trillion devices being manufactured a year. A MLCC capacitor, as its name suggests, is a capacitor which is manufactured with multiple layers of ceramic which serve as the dielectric which are alternated with metal objects which serve as the plates. MLCC capacitors are frequently used in power management systems, including DC and DC converter input and output filters. The growth over the decade of ceramic capacitors has caused other capacitors, such as electrolytic and film capacitors, to experience declining demand over this period.

254. While capacitor types are not interchangeable in the short-term because circuits and products are designed for specific types of capacitors, over a longer time horizon engineers can re-design products so that they use more cost effective components. Advances in technology have also led to the creation of smaller, more efficient ceramic capacitors. Thus, demand for ceramic capacitors has soared as designers have substituted away from expensive and intermittently scarce tantalum, aluminum, and film capacitors and replaced them with much cheaper ceramic capacitors.

Figure 18 below shows the overlap in capacitor consumption through end use products. For certain end-use products, there is substantial overlap in the kind of capacitor that can be used.

**Figure 18: Capacitor Consumption by Type and End-Use Market Segment**

Capacitor Type	Consumer AV Imaging	Telecommunications (Customer and Infrastructure)	Computer & Business Machines	Power & Industrial Infrastructure
Aluminum	X		X	X
Ceramic	X	X	X	
Film	X			X
Tantalum		X	X	

255. Additionally, demand for capacitors tracks demand for electronic products that use them. Thus, declining demand for laptops, desktops and audio-visual equipment (which use tantalum and aluminum capacitors) has resulted in declining demand for tantalum and aluminum capacitors. For instance, Nichicon, which produces aluminum, tantalum and film capacitors, stated in its 2013 Annual Report that its capacitor sales decreased by 21.7 percent from the previous year, which was “attributed to declining demand for digital home electronics and inverter equipment.”

256. By contrast, demand for smaller, more portable and multifunctional electronic devices, such as tablets, smartphones and personal music devices, have led to increased demand for ceramic capacitors, which are key components in tablets, smartphones and personal music devices.

**D. Capacitor Manufacturers Had Relationships in Other Price-Fixed Markets.**

257. Most of the capacitor manufacturers also produce several other types of components, not just capacitors. For instance, NEC TOKIN, Panasonic, and SANYO produced lithium ion rechargeable batteries. NEC TOKIN, Panasonic, and SANYO also produced optical disk drives. Both optical disk drives and lithium ion batteries have been the subject of price-fixing investigations.

**VIII. DEFENDANTS COLLUDED TO KEEP THE PRICE OF ELECTROLYTIC AND FILM CAPACITORS ELEVATED DURING THE CLASS PERIOD**

258. As alleged in this Complaint, defendants engaged in a conspiracy to fix, raise, stabilize, and maintain the price of electrolytic and film capacitors throughout the Class Period.



1 Defendants' acts, practices, and course of conduct in furtherance of their conspiracy evolved over  
2 time and included, but were not limited to the following: coordinating prices for specific customers  
3 and products; engaging in continuous communications on confidential and proprietary business  
4 matters to eliminate price competition; allocating market shares; restricting supply of capacitors;  
5 using input costs as a pretext for industry-wide pricing formulas; and concocting mechanisms to  
6 nullify competitive sales processes to their customers.

7 259. Defendants effectively moderated and even negated the downward pressure on  
8 capacitor prices caused by price competition, oversupply, technological advancements, and demand  
9 reduction.

10 260. Overall, from approximately 2005 to 2013, there was an overall decline in  
11 demand of electrolytic and film capacitors. Part of this decrease in demand is the result of a general  
12 decrease in demand for capacitors caused by a shift from large consumer electronic devices to  
13 smaller devices. This decrease is also the result in a shift to cheaper and more effective capacitors,  
14 such as MLCC ceramic capacitors. The market for electrolytic and film capacitors is nevertheless  
15 still very large. Industry analysts report that global revenues for electrolytic capacitors were  
16 approximately \$5.74 billion in 2013. In 2013, global revenues for film capacitors were  
17 approximately \$1.9 billion.

18 261. To slow down the loss of profitability from such decline during the 2000s,  
19 however, defendants agreed to end price competition among themselves.

20 **A. Defendants Had a Motive to Conspire.**

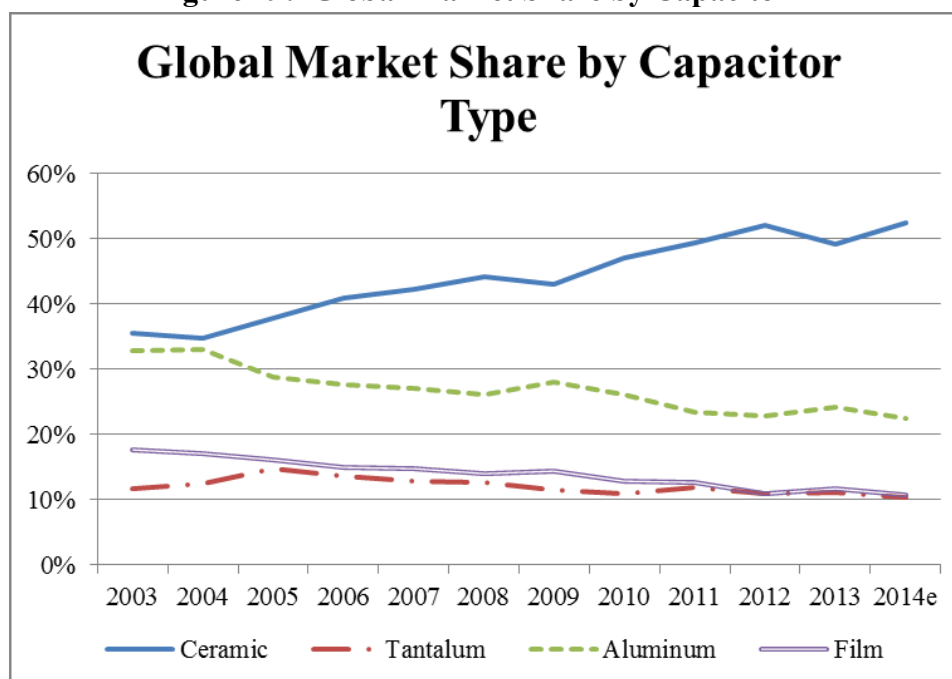
21 262. Over the last decade, the demand for capacitors has been impacted by declining  
22 revenue and demand. Defendants formed, maintained, enforced and concealed a global cartel in the  
23 electrolytic capacitors market, spurred on by economic changes in the early 2000s. Defendants  
24 have faced declining demand for electrolytic and film capacitors. Global revenues for these  
25 capacitors were \$5.74 billion for fiscal year 2013, though this was a \$570 million decline from 2012  
26 and a \$1.1 billion drop from 2005. To mitigate the fall in demand and the impact to profits,  
27  
28

1 defendants agreed that cease price competition among themselves for electrolytic and film  
2 capacitors.

3         263.         The market for aluminum electrolytic capacitors in particular began to shrink  
4 during this period because of the unique characteristics of aluminum electrolytic capacitors.  
5 Aluminum electrolytic capacitors have historically been used in a number of electronic devices,  
6 such as televisions, stereos, and desktop computers, but they were always limited in terms of  
7 capacitance, especially at smaller sizes. In other words, with the growth in smaller electronic  
8 devices, such as tablets and smartphones, aluminum electrolytic capacitors could not be used to  
9 meet that demand since they could not maintain sufficient capacitance to fit those types of devices.  
10 To protect their profits in this shrinking market, defendants entered into a conspiracy to manipulate  
11 the price of aluminum electrolytic capacitors.

12         264.         Overall, demand for capacitors has shifted away from aluminum and tantalum  
13 electrolytic capacitors and film capacitors in favor of ceramic capacitors. Advances in technology  
14 have led to the creation of smaller, more efficient ceramic capacitors, which are also cheaper to  
15 produce. Consequently, purchasers of capacitors gradually redesigned their products to substitute  
16 away from expensive aluminum and tantalum capacitors in favor of cheaper ceramic capacitors.  
17 This shift in demand is shown most clearly in Figure 19, which shows ceramic capacitors increasing  
18 their share of the capacitor market from 35% in 2004 to 52% in 2012 and the steady decrease in  
19 global market share of aluminum and tantalum electrolytic capacitors. This shift in demand created  
20 a crisis within the aluminum and tantalum capacitor industry in which aluminum and tantalum  
21 electrolytic capacitor producers have tried to wrest as much remaining profit from aluminum and  
22 tantalum electrolytic capacitor production before these capacitors are phased out by new designs  
23 and technology. Film capacitors faced similar market issues but the shift to ceramic capacitors  
24 impacted the electrolytic capacitors more significantly.

Figure 19: Global Market Share by Capacitor



265. The global recession of 2008 and 2009 created a drop in demand for electronic consumer goods that employ capacitors as key components. This drop in demand created a crisis within the industry in which revenue fell dramatically, particularly for tantalum capacitors, as opposed to cheap aluminum or ceramic capacitors, because they require substantial investment of labor and resources. Due to the size of the investment necessary to successfully mass manufacture tantalum capacitors, declining demand for tantalum capacitors can substantially impact a manufacturer, who cannot easily shift to the manufacture of different capacitors due to market conditions. Instead, when market demand falls, tantalum capacitor manufacturers are highly motivated to enter into an illegal agreement to fix, stabilize, maintain and raise the price of tantalum electrolytic to ensure continuing profitability. Given the small number of manufacturers who dominate this market, such agreements are easy to enter into between defendants. Defendants had a motive to conspire to stem the revenue losses from the global recession.

266. Demand for capacitors overall has decreased over time, with demand for capacitors in 2013 less than demand for capacitors at pre-recession 2008 levels. This decrease in demand has been more substantial in the market for aluminum and tantalum capacitors and film capacitors, as opposed to other types of capacitors. This drop in demand is tied to a drop in demand

1 for older consumer electronics, such as desktop computers. Globally and in the United States,  
2 consumer demand has shifted in favor of smartphones and tablet computers. These devices contain  
3 functions that formerly were provided through other consumer electronic products. For instance,  
4 the smartphone is making devices, such as digital video cameras, game consoles, GPS devices, and  
5 MP3 players (all of which use capacitors as key electronic components), redundant. The decline in  
6 product sales in this segment of the consumer electronic product market had and continues to have a  
7 strong negative impact on aluminum and tantalum electrolytic capacitor sales. Similarly, in the  
8 computer market, the continued growth of smaller tablet computers negatively impacted demand for  
9 notebook and desktop computers. Because traditional consumer audio and video imaging products  
10 and notebook and desktop computers typically consume more capacitors than smartphones and  
11 tablet computers, the demand shift towards smartphones and tablet computers has resulted in a net  
12 decrease in demand for capacitors. The long-term slowing of demand for capacitors generally also  
13 provided a motive for defendants to reduce production and raise prices above competitive levels to  
14 maintain price stability, increase profitability and decrease the erosion of pricing in the capacitor  
15 market.

16 **B. The Price Movements of Electrolytic and Film Capacitors During the**  
17 **Respective Class Periods Are Consistent with Collusion, Not Competition.**

18 267. Defendants' regular, collusive communications, agreements, and other conduct over  
19 more than a decade, as alleged above, describe defendants' acts in furtherance of their conspiracy.  
20 Pricing behavior, capacity utilization, and the structural and other characteristics of the capacitor  
21 market further demonstrate the existence of defendants' conspiracy.

22 268. There are several econometric techniques that can be used for detecting collusion  
23 and determining its impact. In the absence of adequate data for a fully specified regression model  
24 of the relationship between prices and market supply and demand factors, one can examine broad  
25 market outcomes for patterns that may suggest collusive activity (*i.e.*, patterns that occur rarely  
26 under ordinary competitive conditions). Here, as explained below, during the conspiracy period,  
27 pricing of aluminum and tantalum capacitors was inconsistent with cost and demand. Many

1 analysts predicted that, given technological changes and the economics of the marketplace,  
2 capacitor prices would fall during the respective Class Periods. In fact, prices not only failed to  
3 decline throughout most of the Class Period, they rose.

4 **1. Pricing Behavior Was Inconsistent with Cost.**

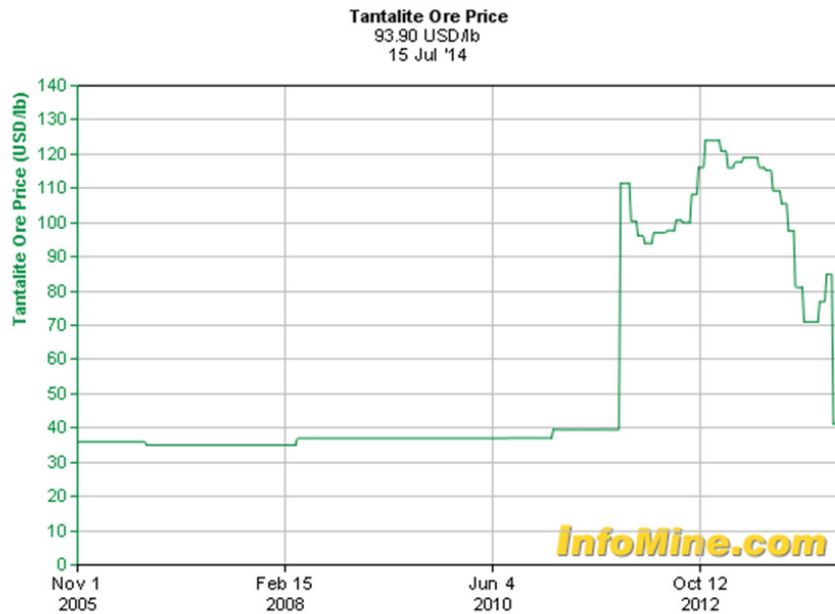
5 269. Price insensitivity to costs can therefore be indicative of market power or  
6 anticompetitive activity. This insensitivity can be seen as either periods when prices are flat despite  
7 changes in important costs or periods when prices increase substantially despite there being no  
8 substantial change in demand factors or costs.

9 270. During the conspiracy period, capacitor industry pricing patterns did not follow cost  
10 variables.

11 271. For example, as shown in Figure 20, tantalite ore prices were flat for most of the  
12 Class Period, even though the prices of tantalum capacitors were generally rising. Tantalite ore is  
13 the main ingredient in tantalum that is used in tantalum capacitors. Tantalum and other raw  
14 materials compose 57% of the cost of a tantalum capacitor. It does not make economic sense that  
15 the price of tantalum capacitors was rising, given diminished demand and flat input costs.

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27

**Figure 20: Tantalite Ore Price**



## **2. Pricing Behavior Was Inconsistent with Demand.**

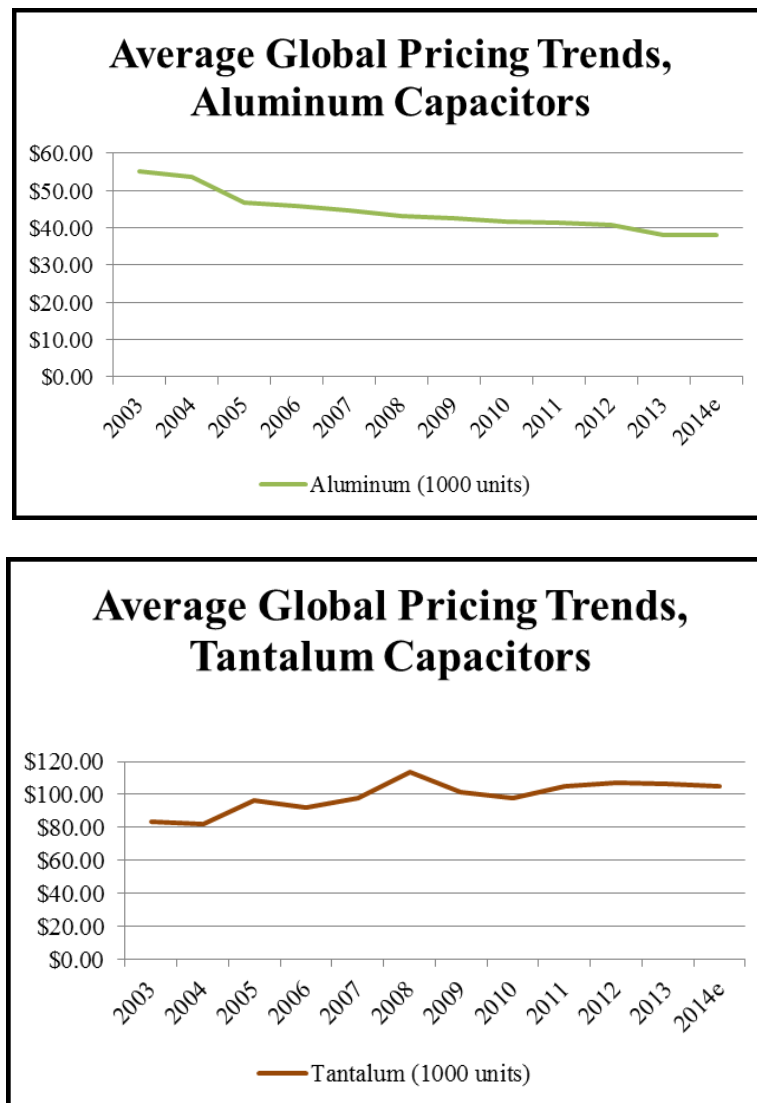
272. Another important relationship is that between price and quantity sold. Rising prices in the face of declining demand can be another indicator of collusive actions or market power.

273. While capacitor types are not interchangeable in the short-term due to the aforementioned specifications that called for specific types of capacitors, over a longer time horizon engineers can re-design products so that they use more cost effective components. That is exactly what has been happening in the capacitor industry. Demand for ceramic capacitors has soared as designers substituted away from expensive and intermittently scarce tantalum and aluminum capacitors and replaced them with much cheaper ceramic capacitors.

274. Other factors have contributed to the soft demand for capacitors. In late 2007 and 2008, the global economy crashed. Additionally, the consumer preference for smartphones and tablet computers has led to decreased demand in consumer audio and visual equipment and notebook and desktop computers, equipment that use more capacitors. This shift towards smartphones and tablet computers had caused a net decrease in demand for capacitors.

275. Despite decreased demand, including the Great Recession, prices for capacitors have not decreased proportionally. Instead, the prices for capacitors have remained relatively stable or even increased. As shown in Figure 21 below, despite sharply diminishing demand for aluminum capacitors, aluminum capacitor prices decreased less than they would have absent the conspiracy to stabilize prices and shield defendants from the full effects of diminished demand. Similarly, tantalum capacitor prices increased or stabilized during the conspiracy period, despite the economic crisis and long-term diminishing demand for tantalum capacitors

**Figure 21: Average Global Pricing Trends**



1           **C. Defendants Conspired to Constrain Supply.**

2           276. Defendants have reduced production and capacity during the conspiracy period in  
3 order to create an artificial shortage of supply. For example, there have been several capacitor plant  
4 closures reported in recent years. In 2010, Panasonic closed down a production facility in East  
5 Knox County, Tennessee that used to produce 3 million capacitors a month.

6           **D. Guilty Pleas in Related Markets**

7           277. Three defendant families and their affiliates have a history of collusion and are  
8 either currently involved in worldwide competition authority investigations into other technology-  
9 related markets, or have been convicted of participating in price-fixing cartels involving  
10 technology-related products. Much of the illegal conduct to which defendants or their affiliates  
11 have admitted took place during the two Class Periods identified in this Complaint.

12                   **1. Hitachi**

13           278. In July 2008, defendant Hitachi Chemical was fined ¥165.37 million by the  
14 JFTC for price-fixing of cross-linked foam polyethylene sheets. This price-fixing activity took  
15 place during the same approximate time period—March 2004 to September 2006—as the beginning  
16 of the alleged capacitor cartel.

17           279. In 2009, the JFTC fined Hitachi Chemical ¥165 million for price-fixing resin  
18 during this same time period.

19                   **2. Panasonic/SANYO**

20           280. On September 30, 2010, defendant Panasonic agreed to plead guilty and to pay a  
21 \$49.1 million criminal fine for its participation in a conspiracy to price-fix refrigerant compressors  
22 from October 14, 2004 through December 31, 2007.

23           281. On July 18, 2013, Panasonic agreed to plead guilty and to pay a \$45.8 million  
24 criminal fine for its participation in a conspiracy to price-fix switches, steering angle sensors and  
25 automotive high intensity discharge ballasts installed in cars sold in the United States and elsewhere  
26 from at least as early as September 2003 until at least February 2010.



282. That same day, Panasonic's subsidiary, SANYO Electric Co., Ltd., agreed to plead guilty and to pay a \$10.731 million criminal fine for its participation in a conspiracy to fix the prices of cylindrical lithium-ion battery cells sold worldwide for use in notebook computer battery packs from about April 2007 until about September 2008. The production and sale of both lithium ion batteries and capacitors were often overseen by the same departments and personnel that were involved in fixing lithium ion battery prices.

### 3. NEC TOKIN

283. Defendant NEC TOKIN is currently a named defendant in another lawsuit concerning the price-fixing of lithium-ion batteries. *See In re Lithium Ion Batteries Antitrust Litig.*, Case No. 12-cv-5129 (N.D. Cal.). NEC TOKIN has also been implicated—though not charged or penalized by regulators—in cartels involving liquid crystal displays, optical disk drives, and lithium-ion batteries. Defendant NEC Electronics America Inc. was a named defendant in a lawsuit concerning the price-fixing of dynamic random-access memory chips. *See In re DRAM Antitrust Litig.*, Case No. 4:02-md-01486 (N.D. Cal.).

284. The foregoing pattern of anticompetitive practices in various technology-related markets is illustrative of defendants' corporate conduct, which has included illegal activity aimed at generating profits at the expense of their customers.

### IX. ANTITRUST INJURY

285. Defendants' price-fixing conspiracy had the following effects, among others:

(a) Price competition has been restrained or eliminated with respect to electrolytic and film capacitors;

(b) The prices of electrolytic and film capacitors have been fixed, raised, maintained, or stabilized at artificially inflated levels;

(c) Indirect purchasers of electrolytic and film capacitors have been deprived of free and open competition; and

(d) Indirect purchasers of electrolytic and film capacitors, including Plaintiffs, paid artificially inflated prices.

1           286.       During the respective Class Periods, Plaintiffs and the Classes paid supra-  
2 competitive prices for electrolytic and film capacitors.

3           287.       By reason of the alleged violations of the antitrust laws, Plaintiffs and the  
4 Classes have sustained injury to their businesses or property, having paid higher prices for  
5 capacitors than they would have paid in the absence of defendants' illegal contract, combination, or  
6 conspiracy, and as a result have suffered damages. This is an antitrust injury of the type that the  
7 antitrust laws were meant to punish and prevent.

8 **X.       THE STATUTE OF LIMITATIONS DO NOT BAR PLAINTIFFS' CLAIMS**

9       **A.       The Statute of Limitations Did Not Begin to Run Because Plaintiffs Did Not and**  
10       **Could Not Discover Their Claims**

11           288.       Plaintiffs and Members of the Classes had no knowledge of the combination or  
12 conspiracy alleged herein, or of facts sufficient to place them on inquiry notice of the claims set  
13 forth herein, until (at the earliest) March 2014, when reports of the investigations into  
14 anticompetitive conduct concerning electrolytic and film capacitors were first publicly  
15 disseminated. Even then, these reports lacked detail and were not widely disseminated.

16           289.       Plaintiffs and Members of the Classes are purchasers who indirectly purchased  
17 electrolytic and film capacitors and/or electronic products containing electrolytic and film  
18 capacitors manufactured by a defendant. They had no direct contact or interaction with any of the  
19 defendants in this case and had no means from which they could have discovered the combination  
20 and conspiracy described in this Complaint before March 2014, when reports of the investigations  
21 into anticompetitive conduct concerning electrolytic and film capacitors were first publicly  
22 disseminated.

23           290.       No information in the public domain was available to Plaintiffs and the Members of  
24 the Classes prior to the public announcements of the government investigations beginning in March  
25 2014 that revealed sufficient information to suggest that any one of the defendants was involved in  
26 a criminal conspiracy to fix prices for electrolytic and film capacitors.

291. Publicly, defendants repeatedly and expressly stated throughout the respective Class Periods, including on their public Internet websites, that they maintained antitrust / fair competition policies which prohibited the type of collusion seen in this litigation. For example:

**SANYO** • SANYO Electric Co., Ltd., in its “Code of Conduct and Ethics,” listed with an establishment date of April 1, 2006, publicly stated: “Free Competition and Fair Commercial Transactions – We will conduct our business activities lawfully and with fairness and transparency.

We will not unfairly limit free competition which would include not making arrangements with others in the same trade about product prices, volumes, manufacturing facilities, and market share.

We will not involve ourselves in bid-rigging to decide the winning bidder and contract price in bidding.”

- SANYO further publicly stated that “We will carry on our business activities in compliance with the laws regulations and rules of each country and region in which we operate and those prescribed specifically for respective business categories.”

**Panasonic** • Panasonic, in its “Panasonic Code of Conduct,” in place through the respective Class Periods, publicly stated that “No matter how severe the competition may be, we will pursue fair and ethical marketing activities in compliance with all applicable laws and regulations. In other words, we will never violate any laws, regulations or social norms in pursuit of greater sales or profit.

We will not engage in bribery, collusion on bids, price fixing or other cartel activities.”

- Panasonic further publicly stated that “we will respect free and fair competition, and abide by all applicable antitrust (competition law) and other laws and regulations” and that “We will fulfill our tasks by always observing not only applicable laws and regulations, but also the highest standards of business ethics” and “We will conduct business with integrity, a law-abiding spirit, and the highest ethical standards.”

**NCC** • Nippon Chemi-Con, in its “Nippon Chemi-Con Group Business Conduct Guidelines,” hold themselves to participate in fair and free competition. Nippon Chemi-Con publically states on their website that “[w]e shall observe applicable laws and regulations in the respective countries and engage in business activities to promote fair and free competition worldwide.”

- Furthermore, “[w]e shall engage in fair transactions without soliciting any suppliers and/or customers money, gifts an entertainment for self-interested purposes...”

**Rubycon** • Rubycon, in its “Rubycon Group Code of Conduct,” listed with an establishment date of April 2013, publicly stated: “The purpose of Rubycon Code of Conduct is to define business activities of the

employees complying with laws and observing environmental responsibility and corporate ethics, under safe labor environment.” Under the “Fair Trade and Ethics” headline, Rubycon listed “no anticompetitive act” as one of their commitments.

- Furthermore, Rubycon emphasizes their commitment to competition under their “Fair Business Practices” on their website. Rubycon states that they are “compliant regarding relevant statutes, internal regulations, social norms and ethics, and excluding relations with antisocial forces, so as to promote business activities through fair and good competition...” Rubycon also commits themselves to “observing all statutes relating to business, and as well as conducting fair business and transactions.”
- Rubycon has published Rubycon Group Code of Conduct conforming to EICC (Electronic Industry Citizenship Coalition), and provided it to all employees and group companies.

292. It was reasonable for members of the Classes who may have been exposed to these public policies to believe that the defendants were enforcing the policies.

293. For these reasons, the statute of limitations as to Plaintiffs and the Classes’ claims did not begin to run, and has been tolled with respect to the claims that Plaintiffs and Members of the Classes have alleged in this Complaint.

**B. Fraudulent Concealment Tolled the Statute of Limitations**

294. In the alternative, application of the doctrine of fraudulent concealment tolled the statute of limitations on the claims asserted herein by Plaintiffs and the Classes. Plaintiffs and the members of the Classes had no knowledge of the combination or conspiracy alleged in this Complaint, or of facts sufficient to place them on inquiry notice of their claims, until news sources first reported in April 2014 that the DOJ was collaborating with NDRC on a joint probe into anticompetitive conduct among capacitor manufacturers. Prior to April 2014, no information in the public domain or available to the Plaintiffs and the Classes suggested that any defendant was involved in a criminal conspiracy to fix prices for capacitors.

295. In an effort to further conceal their conspiracy, defendants misrepresented market conditions to explain price changes and output reductions caused by extended lead times.

1                                   **1.     False Representations Regarding Raw Material Shortages**

2                   296.       Defendants falsely attributed price hikes and production lead times to a shortage  
3 of certain raw materials needed to manufacture aluminum electrolytic capacitors. For example, in  
4 2010, defendants Nichicon, Nippon Chemi-Con, and Panasonic released several public statements  
5 in which they claimed supply limitations and price quote adjustments were caused by shortages of  
6 aluminum foil and increasing costs of the requisite raw materials.

7                   297.       Such false representations are negated by industry reports and supportive data  
8 that reflect aluminum foil to be a widely available raw material and aluminum electrolytic  
9 capacitors to be among those products that are less susceptible to raw material price hikes.

10                  298.       Defendants falsely represented that price hikes and increased production lead  
11 times were the result of difficulties procuring tantalum, the raw material necessary in manufacturing  
12 electrolytic capacitors. Defendants represented to industry experts and analysts, as well as to  
13 consumers, that there were concerns with the supply of tantalum in 1997, 2000, 2008, and 2011,  
14 claiming that issues surrounding the purported closing of certain tantalum mines, the inability of  
15 certain tantalum mines to produce sufficient tantalum, and the inability to access sufficient tantalum  
16 due to the designation of tantalum as a “conflict mineral” under Section 1502 of the 2010 Dodd-  
17 Frank Wall Street Form and Consumer Protection Act (“Dodd-Frank”) would affect defendants’  
18 access to cheap tantalum, which thereafter would result in higher prices for tantalum electrolytic  
19 capacitors.

20                  299.       Such false representations are negated by industry and media reports that  
21 criticize the lack of transparency within the tantalum market where exclusive agreements and  
22 business arrangements between manufactures and tantalum mining operations occur in conjunction  
23 with the desire of manufacturers to process raw materials in-house.

24                  300.       Plaintiffs alleges, upon information and belief, that these explanations did not  
25 provide the whole story and helped conceal the illegal conspiracy entered into by the defendants to  
26 fix, stabilize, maintain and raise the price of electrolytic and film capacitors to inflated, supra-  
27 competitive levels.

1                                    **2.     False Representations Regarding Production Delays**

2                    301.        Defendants also issued several non-market related excuses for price hikes and  
3 output reductions, some of which included labor shortages and Asian weather shipping delays.  
4 Additionally, in 2011 to 2013, defendants Hitachi, Nippon Chemi-Con, Nichicon, Rubycon, and  
5 Elna blamed capacitor production delays on the aftermath of the 2011 Tohoku earthquake and  
6 tsunami in eastern Japan. In 2011, defendant NEC TOKIN and non-defendant ROHM Co., Ltd.  
7 faulted flooding in Thailand for causing production delays.

8                    302.        Through their misleading, deceptive, false, and fraudulent statements, defendants  
9 effectively concealed their unlawful control over the electrolytic and film capacitor markets which  
10 enabled them to manipulate supplies and pricing, thereby causing economic harm to Plaintiffs and  
11 the Class. The misrepresentations made by defendants regarding price changes and extended  
12 production lead times were intended to lull Plaintiffs and the Classes into accepting the price hikes  
13 and extended production lead times as a normal result of competitive and economic market trends  
14 rather than the consequences of defendants' collusive acts. The public statements made by  
15 defendants were designed to blatantly mislead Plaintiffs and the Classes into paying unjustifiably  
16 higher prices for capacitors.

17                    303.        Defendants' misrepresentations for price changes and extended lead times were  
18 pretextually false, deceptive, materially false or misleading, and served only to conceal defendants'  
19 conspiracy and collusive activity from being realized by Plaintiff.

20                    304.        Because defendants kept their conspiracy secret until April 2014, Plaintiffs and  
21 members of the Classes did not know before then that they were paying supra-competitive prices  
22 for electrolytic and film capacitors.

23                    305.        Defendants' anticompetitive conspiracy, by its very nature, was self-concealing.  
24 Electrolytic and film capacitors are not exempt from antitrust regulation, and thus, before April  
25 2014, Plaintiffs reasonably considered the capacitors industry to be a competitive one.  
26 Accordingly, a reasonable person under the circumstances would not have been alerted to begin to  
27 investigate the legitimacy of defendants' capacitor prices before April 2014.

1           306.       Plaintiffs exercised reasonable diligence. Plaintiffs and the Classes could not  
2 have discovered the alleged conspiracy at an earlier date by the exercise of reasonable diligence  
3 because of the deceptive practices and techniques of secrecy employed by defendants and their co-  
4 conspirators to conceal their combination.

5           307.       Therefore, the running of any statute of limitations has been tolled for any claims  
6 alleged by Plaintiffs and the Classes as a result of defendants' anticompetitive and unlawful  
7 conduct.

8           308.       Before that time, Plaintiffs and Members of the Classes were unaware of defendants'  
9 unlawful conduct, and did not know before then that they were paying supracompetitive prices for  
10 electrolytic and film capacitors throughout the United States during the respective Class Periods.  
11 No information, actual or constructive, was ever made available to Plaintiffs that even hinted to  
12 Plaintiffs that they were being injured by defendants' unlawful conduct.

13           309.       The affirmative acts of defendants alleged herein, including acts in furtherance of the  
14 conspiracy, were wrongfully concealed and carried out in a manner that precluded detection.

15           310.       Plaintiffs have detailed herein the defendants' use of mechanisms designed to  
16 conceal their collusion, such as covert meetings, use of code words or terms to refer to competitors  
17 and/or customers, use of pretexts to mask the true purpose of collusive communications, use of non-  
18 company phones, and instructions to destroy emails evidencing collusive activities.

19           311.       By its very nature, defendants' anticompetitive conspiracy was inherently self-  
20 concealing. Electrolytic and film capacitors are not exempt from antitrust regulation, and thus,  
21 before March 2014, Plaintiffs reasonably considered it to be a competitive industry. Accordingly, a  
22 reasonable person under the circumstances would not have been alerted to begin to investigate the  
23 legitimacy of defendants' electrolytic and film capacitor prices before March 2014.

24           312.       Plaintiffs and Members of the Classes could not have discovered the alleged  
25 contract, conspiracy or combination at an earlier date by the exercise of reasonable diligence  
26 because of the deceptive practices and techniques of secrecy employed by defendants and their co-  
27

1 conspirators to avoid detection of, and fraudulently conceal, their contract, combination, or  
2 conspiracy.

3 313. Because the alleged conspiracy was both self-concealing and affirmatively concealed  
4 by defendants and their co-conspirators, Plaintiffs and Members of the Classes had no knowledge  
5 of the alleged conspiracy, or of any facts or information that would have caused a reasonably  
6 diligent person to investigate whether a conspiracy existed, until March 2014, when reports of the  
7 investigations into anticompetitive conduct concerning electrolytic and film capacitors were first  
8 publicly disseminated.

9 314. For these reasons, the statute of limitations applicable to Plaintiffs' and Members of  
10 the Classes' claims was tolled and did not begin to run until, at the earliest, March 2014.

11 **XI. AFFECTED TRADE AND COMMERCE**

12 315. During the respective Class Periods, defendants collectively controlled the vast  
13 majority of the market for electrolytic and film capacitors, both globally and in the United States.

14 316. Defendants sold electrolytic and film capacitors and/or electronic products  
15 containing electrolytic and film capacitors to manufacturers and consumers, located in numerous  
16 states in the United States other than states in which defendants are located. Substantial quantities  
17 of electrolytic and film capacitors and/or electronic products containing electrolytic and film  
18 capacitors are shipped from outside the United States into the United States, and are shipped  
19 interstate in a continuous and uninterrupted flow of interstate and foreign trade and commerce.

20 317. In addition, substantial quantities of equipment and supplies necessary to the  
21 production and distribution of electrolytic and film capacitors and/or electronic products containing  
22 electrolytic and film capacitors, as well as payments for electrolytic and film capacitors and/or  
23 electronic products containing electrolytic and film capacitors and related products sold by  
24 defendants, traveled in interstate and foreign trade and commerce. The business activities of  
25 defendants in connection with the production and sale of electrolytic and film capacitors and/or  
26 electronic products containing electrolytic and film capacitors that were the subject of the charged  
27  
28



1 conspiracy were within the flow of, and substantially affected, interstate and foreign trade and  
2 commerce.

3 **A. Defendants' Conduct Involved Import Trade or Import Commerce**

4 318. Defendants' illegal conduct involved U.S. import trade or import commerce.  
5 Defendants knowingly and intentionally sent price-fixed electrolytic and film capacitors into a  
6 stream of commerce that they knew led directly into the United States, one of their most important  
7 markets and a major source of their revenues. In this respect, they directed their anticompetitive  
8 conduct at imports into the United States with the intent of causing price-fixed electrolytic and film  
9 capacitors to enter the United States market and inflating the prices of electrolytic and film  
10 capacitors destined for the United States. Such conduct was meant to produce and did in fact  
11 produce a substantial effect in the United States in the form of higher prices.

12 319. The U.S. electrolytic and film capacitor market is enormous and was a major focus  
13 of and very important to the conspiracy. Defendants and others shipped millions of electrolytic and  
14 film capacitors, including those incorporated into finished products, into the United States during  
15 the respective Class Periods for ultimate resale to U.S. consumers. As a result, a substantial portion  
16 of defendants' revenues were derived from the U.S. market. Defendants spent hundreds of millions  
17 of dollars on advertising their products in the United States.

18 320. Because of the importance of the U.S. market to defendants and their co-  
19 conspirators, electrolytic and film capacitors and/or electronic products containing electrolytic and  
20 film capacitors intended for importation into and ultimate consumption in the United States were a  
21 focus of defendants' illegal conduct. Defendants knowingly and intentionally sent price-fixed  
22 electrolytic and film capacitors and/or electronic products containing electrolytic and film  
23 capacitors into a stream of commerce that led directly into the United States. Many electrolytic and  
24 film capacitors were intended for incorporation into finished products specifically destined for sale  
25 and use in the United States. This conduct by defendants was meant to produce and did in fact  
26 produce a substantial effect in the United States in the form of artificially-inflated prices for  
27  
28

1 electrolytic and film capacitors and/or electronic products containing electrolytic and film  
2 capacitors.

3 321. During the respective Class Periods, every defendant shipped electrolytic and film  
4 capacitors directly into the United States. Defendants also manufactured and sold electrolytic and  
5 film capacitors to individuals and entities that defendants would be incorporated into electronic  
6 products that would be shipped directly into the United States.

7 322. When high-level executives based at defendants' Asian headquarters agreed on  
8 prices, they knew that their price-fixed electrolytic and film capacitors would be incorporated into  
9 products containing electrolytic and film capacitors sold in the United States. Moreover, because  
10 electrolytic and film capacitors are – and were throughout the Class Period – a significant  
11 component of electronic products containing electrolytic and film capacitors, defendants knew that  
12 price increases for electrolytic and film capacitors would necessarily result in increased prices for  
13 electronic products containing electrolytic and film capacitors sold in the United States. Many  
14 defendants manufactured products containing electrolytic and film capacitors and sold them in the  
15 United States.

16 323. For the reasons set forth above, defendants' illegal conduct involved import trade or  
17 import commerce into the United States.

18 **B. Defendants' Conduct Had a Direct, Substantial, and Reasonably Foreseeable**  
19 **Effect on U.S. Domestic and Import Trade or Commerce That Gave Rise to**  
20 **Plaintiffs' Antitrust Claims**

21 324. Plaintiffs and Members of the Classes are located all across the United States,  
22 including Arizona, Arkansas, California, Florida, Iowa, Kansas, Maine, Michigan, Minnesota,  
23 Missouri, Mississippi, Nebraska, Nevada, New Mexico, New York, North Carolina, North Dakota,  
24 Oregon, South Dakota, Tennessee, Vermont, and West Virginia.

25 325. Defendants' illegal conduct had a direct, substantial, and reasonably foreseeable  
26 effect on U.S. domestic and import trade or commerce in the form of higher prices for electrolytic  
27 and film capacitors and electronic products containing electrolytic and film capacitors that Plaintiffs  
28 and Members of the Classes paid. These prices, tainted by collusion, directly and immediately

1 impacted Plaintiffs and Members of the Classes in the United States. In this respect, the U.S. effects  
2 of defendants' illegal conduct gave rise to Plaintiffs' and Members of the Classes' antitrust claims  
3 and were the proximate cause of the injury that Plaintiffs and Members of the Classes suffered.

4 326. A number of facts demonstrate that defendants' price-fixing conspiracy had a direct,  
5 substantial and reasonably foreseeable effect on domestic commerce.

6 327. Defendants are the dominant suppliers of electrolytic and film capacitors to the  
7 major U.S.-based computer manufacturers, such as Hewlett-Packard Co., Dell Inc., and Apple Inc.,  
8 as well as other massive computer manufacturers whose products are leading brands in the U.S.

9 328. The leading portable computer manufacturers, many of whom are listed above,  
10 dominate the United States market. The following chart illustrates their market shares of laptop  
11 sales as well as estimates the percentage of sales of portable computers within each company's  
12 market share:

13 **Figure 22**  
14 **Laptop PC US Market Share Estimate, 2010**

Company	Total PCs (IDC)	Est. Portable PCs	Value of Shipments	Share
HP	19,488,000	12,878,178	\$8,464,182,308	26.0%
Dell	17,352,000	11,466,653	\$7,536,457,892	23.1%
Acer	8,012,000	5,294,538	\$3,479,835,214	10.7%
Apple	6,571,000	4,342,288	\$2,853,968,696	8.8%
Toshiba	6,623,000	4,376,651	\$2,876,553,747	8.8%
Others	16,964,000	11,210,253	\$7,367,938,663	22.6%
Total	75,010,000	49,568,561	\$32,578,936,521	

2010 Portable PCs as Percent of US PC Sales	66.1%
2010 Average Notebook Price:	\$657.25

21 Notes:

22 Portable PCs estimated as 66.1% of total PC shipments as per IDC forecast.

Value of Shipments based on NPD's average notebook price for 2010.

23 Sources:

24 <http://blog.laptopmag.com/average-windows-laptop-costs-456-down-14-percent-in-24-months>

<http://www.idc.com/getdoc.jsp?containerId=prUS23261412>

25 <http://techcrunch.com/2010/06/15/idc-sees-pc-market-grow-by-19-8-in-2010/>

26 329. With respect to cell phones and smart phones, in 2011, CTIA, an international trade  
27 association that represents the wireless communications industry, reported that wireless device

penetration in the U.S. was 102.2 percent, meaning the “# of active units divided by the total U.S. and territorial population (Puerto Rico, Guam and the U.S. Virgin Islands).”<sup>11</sup> It calculated the number of wireless devices in the United States to be approximately 316,000,000. It defined wireless devices as including “smartphones, feature phones, tablets, hotspots, etc.”

330. The following chart estimates the U.S. market shares of the leading cell and smart phone manufacturers:

**Figure 23**  
**Mobile Phone US Market Share Estimate, 2010**

	Jan - Mar	Mar - May	July - Sep	Oct - Dec	Average Share
Samsung	21.9%	22.4%	23.5%	24.8%	23.2%
Mot	21.9%	21.2%	18.4%	16.7%	19.6%
LG	21.8%	21.5%	21.1%	20.9%	21.3%
RIM	8.3%	8.7%	9.3%	8.5%	8.7%
Nokia	8.3%	8.1%	7.4%	7.0%	7.7%
Other	17.8%	18.1%	20.3%	22.1%	19.6%

Total US Revenue \$10,700,000,000

**Notes:**

Shares are based on subscribers. Three month average for Apr - Jun was not available, so Mar - May average was used instead.

**Sources:**

[http://www.comscore.com/Insights/Press\\_Releases/2010/5/comScore\\_Reports\\_March\\_2010\\_U.S.\\_Mobile\\_Subscriber\\_Market\\_Share](http://www.comscore.com/Insights/Press_Releases/2010/5/comScore_Reports_March_2010_U.S._Mobile_Subscriber_Market_Share)  
[http://www.comscore.com/Insights/Press\\_Releases/2010/7/comScore\\_Reports\\_May\\_2010\\_U.S.\\_Mobile\\_Subscriber\\_Market\\_Share](http://www.comscore.com/Insights/Press_Releases/2010/7/comScore_Reports_May_2010_U.S._Mobile_Subscriber_Market_Share)  
[http://www.comscore.com/Insights/Press\\_Releases/2010/11/comScore\\_Reports\\_September\\_2010\\_U.S.\\_Mobile\\_Subscriber\\_Market\\_Share](http://www.comscore.com/Insights/Press_Releases/2010/11/comScore_Reports_September_2010_U.S._Mobile_Subscriber_Market_Share)  
[http://www.comscore.com/Insights/Press\\_Releases/2011/2/comScore\\_Reports\\_December\\_2010\\_U.S.\\_Mobile\\_Subscriber\\_Market\\_Share](http://www.comscore.com/Insights/Press_Releases/2011/2/comScore_Reports_December_2010_U.S._Mobile_Subscriber_Market_Share)  
<http://www.reuters.com/article/2012/01/06/idUS33079+06-Jan-2012+BW20120106>

<sup>11</sup> 50 *Wireless Quick Facts*, CTIA, <http://www.ctia.org/advocacy/research/index.cfm/aid/10323> (last visited June 30, 2013).

**Figure 24**

**Smartphone Market US Market Share Estimate, 2010**

	Market Share	Sales
HTC	19.0%	\$1,597,596,000
Motorola	11.0%	\$924,924,000
Samsung	7.0%	\$588,588,000
Apple	27.0%	\$2,270,268,000
RIM BlackBerry	27.0%	\$2,270,268,000
HP	1.0%	\$84,084,000
Nokia	2.0%	\$168,168,000
Other	6.0%	\$504,504,000
Total	100.0%	\$8,408,400,000

Estimate of Total Smartphone Units sold in U.S.: <sup>1</sup>	58.8 million
Estimate of Average Selling Price (ASP):	\$143
Estimate of Total U.S. Smartphone Market Value:	\$8,408,400,000

Notes:

<sup>1</sup>Canalys reported that the U.S. smartphone market consisted of 14.7m units in Q2-2010. Yearly estimate is calculated by multiplying by 4.

Sources:

MarketShare: Ziegler, Chris. "Visualized: US smartphone market share, by manufacturer and platform, made pretty."

Engadget. 3-Mar-11. Accessed 21-Jun-13. <http://www.engadget.com/2011/03/03/visualized-us-smartphone-market-share-by-manufacturer-and-plat/>.

Units Sold: "Android smart phone shipments grow 886% year-on-year in Q2 2010." Canalys. 2-Aug-2010. Accessed 21-Jun-13.

<http://www.canalys.com/newsroom/android-smart-phone-shipments-grow-886-year-year-q2-2010>.

ASP: Gonsalves, Antone. "Android Takes Lead In U.S. Smartphone Market." InformationWeek. 4-Aug-2010. Accessed 21-Jun-13.

<http://www.informationweek.com/software/operating-systems/android-takes-lead-in-us-smartphone-mark/226500293>.

**C. The Capacitor Cartel Targeted the United States.**

331. Because of the small size of capacitors, transportation costs are relatively minor and there is substantial international trade in these electronic components. As shown in Figure 28, the major capacitor manufacturers sell throughout the world, including in the Americas

**Figure 25: Capacitor Revenues by Vendor and Region**

**Capacitor Revenues by Vendor and Region  
FY 2014**

Vendor	Region				Total Revenue	Percent of Total
	China and Asia	Japan	Europe	Americas		
	(Million USD)					
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Murata	\$ 1,795	\$ 369	\$ 290	\$ 185	\$ 2,639	14 %
SEMCO	1,397	0	170	174	1,741	10
TDK-EPC	858	174	161	148	1,341	7
Kyocera/AVX	419	300	218	236	1,173	6
Taiyo Yuden	684	249	62	42	1,037	6
NCC	550	265	98	69	982	5
Nichicon	358	393	51	52	854	5
KEMET	306	0	281	240	827	5
Vishay	161	0	165	115	441	2
Yageo	261	0	85	7	353	2
Walsin	206	0	18	5	229	1
Others	3,865	769	1,120	880	6,634	36
Total	\$ 10,860	\$ 2,519	\$ 2,719	\$ 2,153	\$ 18,251	
Percent of Total	59.5 %	13.8 %	14.9 %	11.8 %		

Source: Paumanok Publications, Inc.

332. In 2012, the United States Census reported roughly \$1.4 billion in United States capacitor exports and \$1.09 billion in imports. As depicted in Figure 26, both exports and imports had experienced a downturn in 2009 following the United States financial crisis and have since recovered

**Figure 26: United States Capacitor Trade Revenue**



Source: U.S. Census

333. Japan is a major exporter of capacitors to the United States. The Japanese Ministry of Finance data indicates that capacitor exports to the United States currently account for 10% of Japanese capacitor export revenue.

334. During the period this Complaint covers, defendants manufactured and sold substantial quantities of electrolytic and film capacitors shipped from outside the United States and from other states in a continuous and uninterrupted flow of interstate and foreign trade and commerce. In addition, substantial quantities of equipment and supplies necessary to the production and distribution of electrolytic and film capacitors, as well as payments for capacitors and related products sold by defendants, traveled in interstate and foreign trade and commerce. The business activities of defendants in connection with the production and sale of electrolytic and film capacitors that were the subject of the charged conspiracy were within the flow of, and affected substantially, interstate and foreign trade and commerce.

335. Defendants engaged in conduct both inside and outside the United States that caused direct, substantial, and reasonably foreseeable and intended anticompetitive effects upon interstate commerce within the United States.

336. Defendants, directly and through their agents, engaged in a conspiracy to fix or inflate prices of electrolytic and film that restrained trade unreasonably and affected adversely the market for capacitors. Defendants affected commerce, including import commerce, substantially throughout the United States, proximately causing injury to Plaintiffs and members of the Classes.

## **XII. CLASS ACTION ALLEGATIONS**

337. Plaintiffs bring this action on behalf of themselves and as a class action pursuant to Federal Rules of Civil Procedure 23(a) and (b)(2), seeking equitable and injunctive relief on behalf of the following classes (the “Injunctive Classes”):

**Electrolytic Injunctive Class:** All persons and entities in the United States who, during the period from January 1, 2003 to the present, purchased one or more electrolytic capacitor(s) from a capacitor distributor and/or an electronic product not for resale which included one or more electrolytic capacitor(s) as component parts, which a defendant manufactured.

**Film Injunctive Class:** All persons and entities in the United States who, during the period from January 1, 2007 to the present, purchased one or more film capacitor(s) from a capacitor distributor and/or an electronic product not for resale which included one or more film capacitor(s) as component parts, which a defendant manufactured.

338. Plaintiffs also bring this action on behalf of themselves and as a nationwide class action under Federal Rules of Civil Procedure 23(a) and (b)(3) seeking damages pursuant to California’s antitrust and unfair competition laws on behalf of the following class (the “Nationwide Damages Classes”):

**Electrolytic Nationwide Damages Class:** All persons and entities in the United States who, during the period from January 1, 2003 to the present, purchased one or more electrolytic capacitor(s) from a capacitor distributor and/or an electronic product not for resale which included one or more electrolytic capacitor(s) as component parts, which a defendant or con-conspirator manufactured.

**Film Nationwide Damages Class:** All persons and entities in the United States who, during the period from January 1, 2007 to the present, purchased one or more film capacitor(s) from a capacitor distributor and/or an electronic product not for resale which included one or more film capacitor(s) as component parts, which a defendant or con-conspirator manufactured.

339. As an alternative to the Nationwide Damages Classes, in the event that the Court does not apply California law to all members of the Classes’ claims for damages regardless of where they reside or to members of the Classes’ claims for damages residing in states that recognize



1 indirect purchaser claims, Plaintiffs will seek certification of classes asserting claims of damages  
2 under the antitrust statutes and/or consumer protection statutes of the following twenty-two (22)  
3 jurisdictions: Arizona, Arkansas, California, Florida, Iowa, Kansas, Maine, Michigan, Minnesota,  
4 Missouri, Mississippi, Nebraska, Nevada, New Mexico, New York, North Carolina, North Dakota,  
5 Oregon, South Dakota, Tennessee, Vermont, and West Virginia (collectively, “State Damages  
6 Classes”).

7 340. The Injunctive Classes, Nationwide Damages Classes, and State Damages Classes  
8 are collectively referred as the “Classes” unless otherwise indicated. Excluded from the Classes are  
9 defendants, their parent companies, subsidiaries and affiliates, any co-conspirators, defendants’  
10 attorneys in this case, federal government entities and instrumentalities, states and their  
11 subdivisions, all judges assigned to this case, all jurors in this case, and all persons and entities who  
12 directly purchased electrolytic and/or film capacitors from defendants.

13 341. While Plaintiffs do not know the exact number of the members of the Classes,  
14 Plaintiffs believe there are millions of members in each Class.

15 342. Common questions of law and fact exist as to all members of the Classes. This is  
16 particularly true given the nature of defendants’ conspiracy, which was applicable to all of the  
17 members of the Classes, thereby making appropriate relief with respect to the Classes as a whole.  
18 Such questions of law and fact common to the Classes include, but are not limited to:

- 19 (a) Whether defendants engaged in a combination and conspiracies among  
20 themselves to fix, raise, maintain, and/or stabilize the prices of electrolytic  
21 and film capacitors sold in the United States;
- 22 (b) The identity of the participants of the alleged conspiracies;
- 23 (c) The duration of the alleged conspiracies and the acts carried out by  
24 defendants in furtherance of the conspiracies;
- 25 (d) Whether the alleged conspiracies violated the Sherman Act;
- 26 (e) Whether the alleged conspiracies violated various state antitrust and restraint  
27 of trade laws;

- 1 (f) Whether the alleged conspiracies violated various state consumer protection  
2 and unfair competition laws;
- 3 (g) Whether the conduct of defendants, as alleged in this Complaint, caused  
4 injury to the business or property of Plaintiffs and the members of the  
5 Classes
- 6 (h) The effect of the alleged conspiracy on the prices of electrolytic and film  
7 capacitors and electronic products containing electrolytic and film capacitors  
8 sold in the United States during the respective Class Periods;
- 9 (i) The appropriate injunctive and related equitable relief for the Injunctive  
10 Classes;
- 11 (j) The appropriate class-wide measure of damages for the Nationwide Damages  
12 Classes; and
- 13 (k) The appropriate class-wide measure of damages for the State Damages  
14 Classes.

15 343. Plaintiffs' claims are typical of the claims of the members of the Classes, and  
16 Plaintiffs will fairly and adequately protect the interests of the Classes. Plaintiffs and all members  
17 of the Classes are similarly affected by defendants' wrongful conduct in that they paid artificially  
18 inflated prices for electrolytic and film capacitors and/or electronic products containing electrolytic  
19 and film capacitors purchased indirectly from defendants.

20 344. Plaintiffs' claims arise out of the same common course of conduct giving rise to the  
21 claims of the other members of the Classes. Plaintiffs' interests are coincident with, and not  
22 antagonistic to, those of the other members of the Classes. Plaintiffs are represented by counsel who  
23 are competent and experienced in the prosecution of antitrust, consumer protection and class action  
24 litigation.

25 345. The questions of law and fact common to the members of the Classes predominate  
26 over any questions affecting only individual members, including legal and factual issues relating to  
27 liability and damages.

1           346. Class action treatment is a superior method for the fair and efficient adjudication of  
2 the controversy, in that, among other things, such treatment will permit a large number of similarly  
3 situated persons to prosecute their common claims in a single forum simultaneously, efficiently and  
4 without the unnecessary duplication of evidence, effort and expense that numerous individual  
5 actions would engender. The benefits of proceeding through the class mechanism, including  
6 providing injured persons or entities with a method for obtaining redress for claims that it might not  
7 be practicable to pursue individually, substantially outweigh any difficulties that may arise in  
8 management of this class action.

9           347. The prosecution of separate actions by individual members of the Classes would  
10 create a risk of inconsistent or varying adjudications, establishing incompatible standards of  
11 conduct for defendants.

12           348. Plaintiffs bring the State Damages Classes on behalf of all persons similarly situated  
13 pursuant to Federal Rule of Civil Procedure 23, on behalf of all members of the following classes:

- 14           (a) **Arizona:** All persons and entities that, as residents of Arizona, indirectly  
15 purchased one or more electrolytic or film capacitors and/or electronic  
16 products containing one or more electrolytic or film capacitors that a  
defendant or co-conspirator manufactured during the respective Class Periods  
(the “Arizona Damages Class”).
- 17           (b) **Arkansas:** All persons and entities that, as residents of Arkansas, indirectly  
18 purchased one or more electrolytic or film capacitors and/or electronic  
19 products containing one or more electrolytic or film capacitors that a  
defendant or co-conspirator manufactured during the respective Class Periods  
(the “Arkansas Damages Class”).
- 20           (c) **California:** All persons and entities that, as residents of California,  
21 indirectly purchased one or more electrolytic or film capacitors and/or  
22 electronic products containing one or more electrolytic or film capacitors that  
a defendant or co-conspirator manufactured during the respective Class  
Periods (the “California Damages Class”).
- 23           (d) **Florida:** All persons and entities that, as residents of Florida, indirectly  
24 purchased one or more electrolytic or film capacitors and/or electronic  
25 products containing one or more electrolytic or film capacitors that a  
defendant or co-conspirator manufactured during the respective Class Periods  
(the “Florida Damages Class”).
- 26           (e) **Iowa:** All persons and entities that, as residents of Iowa, indirectly  
27 purchased one or more electrolytic or film capacitors and/or electronic  
products containing one or more electrolytic or film capacitors that a

defendant or co-conspirator manufactured during the respective Class Periods (the “Iowa Damages Class”).

(f) **Kansas:** All persons and entities that, as residents of Kansas, indirectly purchased one or more electrolytic or film capacitors and/or electronic products containing one or more electrolytic or film capacitors that a defendant or co-conspirator manufactured during the respective Class Periods (the “Kansas Damages Class”).

(g) **Maine:** All persons and entities that, as residents of Maine, indirectly purchased one or more electrolytic or film capacitors and/or electronic products containing one or more electrolytic or film capacitors that a defendant or co-conspirator manufactured during the respective Class Periods (the “Maine Damages Class”).

(h) **Michigan:** All persons and entities that, as residents of Michigan, indirectly purchased one or more electrolytic or film capacitors and/or electronic products containing one or more electrolytic or film capacitors that a defendant or co-conspirator manufactured during the respective Class Periods (the “Michigan Damages Class”).

(i) **Minnesota:** All persons and entities that, as residents of Minnesota, indirectly purchased one or more electrolytic or film capacitors and/or electronic products containing one or more electrolytic or film capacitors that a defendant or co-conspirator manufactured during the respective Class Periods (the “Minnesota Damages Class”).

(j) **Missouri:** All persons and entities that, as residents of Missouri, indirectly purchased one or more electrolytic or film capacitors and/or electronic products containing one or more electrolytic or film capacitors that a defendant or co-conspirator manufactured during the respective Class Periods (the “Missouri Damages Class”).

(k) **Mississippi:** All persons and entities that, as residents of Mississippi, indirectly purchased one or more electrolytic or film capacitors and/or electronic products containing one or more electrolytic or film capacitors that a defendant or co-conspirator manufactured during the respective Class Periods (the “Mississippi Damages Class”).

(l) **Nebraska:** All persons and entities that, as residents of Nebraska, indirectly purchased one or more electrolytic or film capacitors and/or electronic products containing one or more electrolytic or film capacitors that a defendant or co-conspirator manufactured during the respective Class Periods (the “Nebraska Damages Class”).

(m) **Nevada:** All persons and entities that, as residents of Nevada, indirectly purchased one or more electrolytic or film capacitors and/or electronic products containing one or more electrolytic or film capacitors that a defendant or co-conspirator manufactured during the respective Class Periods (the “Nevada Damages Class”).

(n) **New Mexico:** All persons and entities that, as residents of New Mexico, indirectly purchased one or more electrolytic or film capacitors and/or electronic products containing one or more electrolytic or film capacitors that

1 a defendant or co-conspirator manufactured during the respective Class  
2 Periods (the “New Mexico Damages Class”).

3 (o) **New York:** All persons and entities that, as residents of New York,  
4 indirectly purchased one or more electrolytic or film capacitors and/or  
5 electronic products containing one or more electrolytic or film capacitors that  
6 a defendant or co-conspirator manufactured during the respective Class  
7 Periods (the “New York Damages Class”).

8 (p) **North Carolina:** All persons and entities that, as residents of North  
9 Carolina, indirectly purchased one or more electrolytic or film capacitors  
10 and/or electronic products containing one or more electrolytic or film  
11 capacitors that a defendant or co-conspirator manufactured during the  
12 respective Class Periods (the “North Carolina Damages Class”).

13 (q) **North Dakota:** All persons and entities that, as residents of North Dakota,  
14 indirectly purchased one or more electrolytic or film capacitors and/or  
15 electronic products containing one or more electrolytic or film capacitors that  
16 a defendant or co-conspirator manufactured during the respective Class  
17 Periods (the “North Dakota Damages Class”).

18 (r) **Oregon:** All persons and entities that, as residents of Oregon, indirectly  
19 purchased one or more electrolytic or film capacitors and/or electronic  
20 products containing one or more electrolytic or film capacitors that a  
21 defendant or co-conspirator manufactured during the respective Class Periods  
22 (the “Oregon Damages Class”).

23 (s) **South Dakota:** All persons and entities that, as residents of South Dakota,  
24 indirectly purchased one or more electrolytic or film capacitors and/or  
25 electronic products containing one or more electrolytic or film capacitors that  
26 a defendant or co-conspirator manufactured during the respective Class  
27 Periods (the “South Dakota Damages Class”).

28 (t) **Tennessee:** All persons and entities that, as residents of Tennessee,  
indirectly purchased one or more electrolytic or film capacitors and/or  
electronic products containing one or more electrolytic or film capacitors that  
a defendant or co-conspirator manufactured during the respective Class  
Periods (the “Tennessee Damages Class”).

(u) **Vermont:** All persons and entities that, as residents of Vermont, indirectly  
purchased one or more electrolytic or film capacitors and/or electronic  
products containing one or more electrolytic or film capacitors that a  
defendant or co-conspirator manufactured during the respective Class Periods  
(the “Vermont Damages Class”).

(v) **West Virginia:** All persons and entities that, as residents of West Virginia,  
indirectly purchased one or more electrolytic or film capacitors and/or  
electronic products containing one or more electrolytic or film capacitors that  
a defendant or co-conspirator manufactured during the respective Class  
Periods (the “West Virginia Damages Class”).

1 **XIII. VIOLATIONS ALLEGED**

2 **FIRST CLAIM FOR RELIEF**  
3 **(Violations of Sherman Act, 15 U.S.C. § 1)**  
4 **(On Behalf of All Plaintiffs Against All Defendants)**

5 349. Plaintiffs incorporate and reallege, as though fully set forth herein, each of the  
6 paragraphs set forth above.

7 350. Defendants and unnamed coconspirators entered into and engaged in a contract,  
8 combination, or conspiracy in unreasonable restraint of trade in violation of Section One of the  
9 Sherman Act (15 U.S.C. § 1).

10 351. Beginning as early as 2003 and continuing through the present, the exact starting  
11 date being unknown to Plaintiffs and exclusively within the knowledge of defendants, defendants  
12 and their co-conspirators entered into a continuing contract, combination, or conspiracy to  
13 unreasonably restrain trade and commerce in violation of Section 1 of the Sherman Act (15 U.S.C.  
14 § 1) by artificially reducing or eliminating competition in the United States.

15 352. In particular, defendants have combined and conspired to raise, fix, maintain, or  
16 stabilize the prices of electrolytic and film capacitors.

17 353. As a result of defendants' unlawful conduct, prices for electrolytic and film  
18 capacitors were raised, fixed, maintained, and stabilized in the United States.

19 354. The contract, combination or conspiracy among defendants consisted of a continuing  
20 agreement, understanding, and concerted action among defendants and their co-conspirators.

21 355. For purposes of formulating and effectuating their contract, combination, or  
22 conspiracy, defendants and their co-conspirators did those things they contracted, combined, or  
23 conspired to do, including:

- 24 (a) exchanged information on prices charged for electrolytic and film capacitors;
- 25 (b) agreed to raise, fix, and maintain prices for electrolytic and film capacitors;
- 26 (c) raised, fixed, and maintained prices for electrolytic and film capacitors; and
- 27 (d) sold electrolytic and film capacitors into and throughout the U.S. at non-  
28 competitive prices.

1           356. As a result of defendants' unlawful conduct, Plaintiffs and the other members of the  
2 Classes have been injured in their businesses and property in that they have paid more for  
3 electrolytic and film capacitors and/or electronic products containing electrolytic and film  
4 capacitors than they otherwise would have paid in the absence of defendants' unlawful conduct.

5           357. The alleged contract, combination or conspiracy is a per se violation of the federal  
6 antitrust laws.

7           358. These violations are continuing and will continue unless enjoined by this Court.

8           359. Pursuant to Section 16 of the Clayton Act, 15 U.S.C. § 26, Plaintiffs and the Classes  
9 seek the issuance of an injunction against defendants, preventing and restraining the violations  
10 alleged herein.

11                           **SECOND CLAIM FOR RELIEF**  
12                           **(Violations of the Cartwright Act,**  
                              **Cal. Bus. & Prof. Code §§ 16720, *et seq.*)**  
                              **(On Behalf of All Plaintiffs Against All Defendants)**

13           360. Plaintiffs incorporate by reference all the above allegations as if fully set forth  
14 herein.

15           361. By reason of the foregoing, defendants have violated California Business and  
16 Professions Code, §§ 16700, *et seq.* California Plaintiffs on behalf of a nationwide class of Indirect  
17 Purchasers alleges as follows.

18           362. Beginning at a time currently unknown to California Plaintiffs, but at least as early  
19 as January 1, 2003, and continuing thereafter through the present, defendants and their co-  
20 conspirators entered into and engaged in a continuing unlawful trust in restraint of the trade and  
21 commerce described above in violation of section 16720, California Business and Professions  
22 Code. Defendants, and each of them, have acted in violation of section 16720 to fix, raise, stabilize,  
23 and maintain prices of, and allocate markets for electrolytic and film capacitors at supra-  
24 competitive levels.

25           363. In particular, defendants have combined and conspired to raise, fix, maintain or  
26 stabilize the prices of electrolytic and film capacitors sold in the United States.

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1           364. As a result of defendants' unlawful conduct, prices for electrolytic and film  
2 capacitors were raised, fixed, maintained, and stabilized in the United States.

3           365. The contract, combination or conspiracy among defendants consisted of a continuing  
4 agreement, understanding, and concerted action among defendants and their co-conspirators.

5           366. For purposes of formulating and effectuating their contract, combination, or  
6 conspiracy, defendants and their co-conspirators did those things they contracted, combined, or  
7 conspired to do, including:

8           a. Participating in meetings and conversations to discuss the prices and supply of  
9 electrolytic and film capacitors.

10           b. Communicating in writing and orally to fix prices of electrolytic and film capacitors.

11           c. Agreeing to manipulate prices and supply of electrolytic and film capacitors sold in the  
12 United States in a manner that deprived direct and indirect purchasers of free and open competition.

13           d. Issuing price announcements and price quotations in accordance with the agreements  
14 reached.

15           e. Selling electrolytic and film capacitors to customers in the United States at non-  
16 competitive prices.

17           f. Providing false statements to the public to explain increased prices for electrolytic and  
18 film capacitors.

19           367. As a direct and proximate result of defendants' unlawful conduct, California  
20 plaintiffs and the members of the California Indirect Purchaser Classes have been injured in their  
21 business and property in that they paid more for electrolytic and film capacitors and/or electronic  
22 products containing electrolytic and film capacitors than they otherwise would have paid in the  
23 absence of defendants' unlawful conduct. As a result of defendants' violation of Section 16720 of  
24 the California Business and Professions Code, California Plaintiffs and the California Indirect  
25 Purchaser Classes seek treble damages and their cost of suit, including a reasonable attorney's fee,  
26 pursuant to section 16750(a) of the California Business and Professions Code.

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1           368. It is appropriate to apply California antitrust law to purchasers of electrolytic and  
2 film capacitors and/or electronic products containing electrolytic and film capacitors in all fifty  
3 states—that is, nationwide. Nationwide application of California law is proper because four of the  
4 eight U.S.-based defendants (Hitachi Chemical Co. America, Ltd., SANYO Electronic Device  
5 (U.S.A.) Corp., Elna America Inc., NEC TOKIN America Inc.), are headquartered in California,  
6 conspiratorial acts occurred in California, and the conspirators targeted their price-fixing activities  
7 at large purchasers of electrolytic and film capacitors and/or electronic products containing  
8 electrolytic and film capacitors in California, such as Apple Inc., Intel Corp., and Hewlett Packard  
9 Co.

10           369. The vast majority of defendants maintained sales and marketing arms in the United  
11 States to conduct business with major customers. These defendants are incorporated, located, and  
12 headquartered in the United States, and each does substantial business in domestic interstate  
13 commerce throughout the United States. For example, NCC maintained offices in Lansing, North  
14 Carolina and Buena Park, California to be responsible for manufacturing and selling capacitors.

15           370. The foreign-based defendants have no reasonable expectation as to the application of  
16 different state laws. Based on Plaintiffs' information and belief, California law applies to contracts  
17 with California-based companies, such as Apple Inc., Intel Corp., and Hewlett Packard Co.

18           371. If the Court were to determine that California law should not apply nationwide, the  
19 Court should apply California law to the consumers in the twenty-two states which provide standing  
20 to indirect purchasers. This is because the law of these twenty-twostates is harmonized so there is  
21 no true conflict of law here.

22                                   **THIRD CLAIM FOR RELIEF**  
23                                   **(Violations of California's Unfair Competition Law,**  
24                                   **Cal. Bus. & Prof. Code §§ 17200, *et seq.*)**  
                                  **(On Behalf of All Plaintiffs Against All Defendants)**

25           372. Plaintiffs incorporate by reference the allegations in the above paragraphs as if fully  
26 set forth herein.

27           373. By reason of the foregoing, defendants have violated California's Unfair  
28 Competition Law, Cal. Bus. & Prof. Code §§ 17200, *et seq.*

1           374. Defendants committed acts of unfair competition, as defined by section 17200, *et*  
2 *seq.*, by engaging in a conspiracy to fix and stabilize the price of electrolytic and film capacitors as  
3 described above.

4           375. The acts, omissions, misrepresentations, practices and non-disclosures of defendants,  
5 as described above, constitute a common and continuing course of conduct of unfair competition by  
6 means of unfair, unlawful and/or fraudulent business acts or practices with the meaning of Section  
7 17200, *et seq.*, including, but not limited to (1) violations of Section 1 of the Sherman Act; and (2)  
8 violations of the Cartwright Act.

9           376. Defendants' acts, omissions, misrepresentations, practices and nondisclosures are  
10 unfair, unconscionable, unlawful and/or fraudulent independently of whether they constitute a  
11 violation of the Sherman Act or the Cartwright Act.

12           377. Defendants' acts or practices are fraudulent or deceptive within the meaning of  
13 section 17200, *et seq.*

14           378. Defendants' conduct was carried out, effectuated, and perfected within the state of  
15 California. Defendants maintained offices in California where their employees engaged in  
16 communications, meetings and other activities in furtherance of defendants' conspiracy.

17           379. By reason of the foregoing, the Classes are entitled to application of California law  
18 to a nationwide class and are entitled to full restitution and/or disgorgement of all revenues,  
19 earnings, profits, compensation, and benefits that may have been obtained by defendants as result of  
20 such business acts and practices described above.

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**FOURTH CLAIM FOR RELIEF  
(Violation of State Antitrust and Restraint of Trade Laws)  
(On Behalf of All Plaintiffs Against All Defendants)**

380. Plaintiffs incorporate by reference the allegations in the above paragraphs as if fully set forth herein.

381. In the event that the Court does not apply California law on a nationwide basis, Plaintiffs allege the following violations of state antitrust and restraint of trade laws in the alternative.

382. Arizona: By reason of the foregoing, defendants have violated Arizona Revised Statutes, §§ 44-1401, *et seq.* Arizona Plaintiff on behalf of the Arizona Damages Classes alleges as follows:

a. Defendants' combination or conspiracy had the following effects: (1) price competition for electrolytic and film capacitors was restrained, suppressed, and eliminated throughout Arizona; (2) prices for electrolytic and film capacitors were raised, fixed, maintained and stabilized at artificially high levels throughout Arizona; (3) Arizona Plaintiff and members of the Arizona Damages Class were deprived of free and open competition; and (4) Arizona Plaintiff and members of the Arizona Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors.

b. During the respective Class Periods, defendants' illegal conduct substantially affected Arizona commerce.

c. As a direct and proximate result of defendants' unlawful conduct, Arizona Plaintiff and members of the Arizona Damages Class have been injured in their business and property and are threatened with further injury.

d. By reason of the foregoing, defendants entered into agreements in restraint of trade in violation of Arizona Revised Statutes §§ 44-1401, *et seq.* Accordingly, Arizona Plaintiff and the members of the Arizona Damages Class seek all forms of relief available under Arizona Revised Statutes §§ 44-1401, *et seq.*

1           383.   California: By reason of the foregoing, defendants have violated California Business  
2 and Professions Code, §§ 16700, *et seq.* California Plaintiffs on behalf of the California Damages  
3 Class alleges as follows:

4           a.       Defendants' contract, combination, trust or conspiracy was entered in, carried out,  
5 effectuated and perfected mainly within the State of California, and defendants' conduct within  
6 California injured all members of the Classes throughout the United States. Therefore, this claim  
7 for relief under California law is brought on behalf of the California Damages Class.

8           b.       Beginning at a time currently unknown to California Plaintiffs, but at least as early  
9 as January 1, 2003, and continuing thereafter up to the present, defendants and their co-conspirators  
10 entered into and engaged in a continuing unlawful trust in restraint of the trade and commerce  
11 described above in violation of section 16720, California Business and Professions Code.  
12 Defendants, and each of them, have acted in violation of section 16720 to fix, raise, stabilize, and  
13 maintain prices of electrolytic and film capacitors at supra-competitive levels.

14           c.       The aforesaid violations of section 16720, California Business and Professions Code,  
15 consisted, without limitation, of a continuing unlawful trust and concert of action among the  
16 defendants and their co-conspirators, the substantial terms of which were to fix, raise, maintain, and  
17 stabilize the prices of electrolytic and film capacitors.

18           d.       For the purpose of forming and effectuating the unlawful trust, the defendants and  
19 their co-conspirators have done those things which they combined and conspired to do, including  
20 but not in any way limited to the acts, practices and course of conduct set forth above and fixing,  
21 raising, stabilizing, and pegging the price of electrolytic and film capacitors.

22           e.       The combination and conspiracy alleged herein has had, *inter alia*, the following  
23 effects: (1) price competition in the sale of electrolytic and film capacitors has been restrained,  
24 suppressed, and/or eliminated in the State of California; (2) prices for electrolytic and film  
25 capacitors have been fixed, raised, stabilized, and pegged at artificially high, noncompetitive levels  
26 in the State of California; and (3) those who purchased electrolytic and film capacitors indirectly  
27 from defendants and their co-conspirators and/or electronic products containing electrolytic and

1 film capacitors that a defendant or co-conspirator manufactured have been deprived of the benefit  
2 of free and open competition.

3 f. As a direct and proximate result of defendants' unlawful conduct, California  
4 Plaintiffs and the members of the California Damages Class have been injured in their business and  
5 property in that they paid more for electrolytic and film capacitors and/or electronic products  
6 containing electrolytic and film capacitors than they otherwise would have paid in the absence of  
7 defendants' unlawful conduct. As a result of defendants' violation of Section 16720 of the  
8 California Business and Professions Code, California Plaintiffs and the California Damages Class  
9 seek treble damages and their cost of suit, including a reasonable attorney's fee, pursuant to section  
10 16750(a) of the California Business and Professions Code.

11 384. Iowa: By reason of the foregoing, defendants have entered into an unlawful  
12 agreement in restraint of trade in violation of the Iowa Code §§ 553.1, *et. seq.*

13 (a) Defendants' unlawful conduct had the following effects: (1) electrolytic and film  
14 capacitors price competition was restrained, suppressed, and eliminated throughout Iowa; (2)  
15 electrolytic and film capacitors prices were raised, fixed, maintained, and stabilized at artificially  
16 high levels throughout Iowa; (3) Plaintiffs and members of the Damages Class were deprived of  
17 free and open competition; and (4) Plaintiffs and members of the Damages Class paid  
18 supracompetitive, artificially inflated prices for electrolytic and film capacitors and/or electronic  
19 products containing electrolytic and film capacitors.

20 (b) During the respective Class Periods, defendants' illegal conduct substantially  
21 affected Iowa commerce.

22 (c) As a direct and proximate result of defendants' unlawful conduct, Plaintiffs and  
23 members of the Damages Class have been injured in their business and property and are threatened  
24 with further injury.

25 (d) By reason of the foregoing, defendants have entered into agreements in restraint of  
26 trade in violation of Iowa Code §§ 553.1, *et. seq.* Accordingly, Plaintiffs and members of the  
27 Damages Class seek all forms of relief available under Iowa code §§ 553.1, *et. seq.*

1           385. Kansas: By reason of the foregoing, defendants have violated Kansas Statutes, §§  
2 50-101, *et seq.* Kansas Plaintiff on behalf of the Kansas Damages Class alleges as follows:

3           a. Defendants' combination or conspiracy had the following effects: (1) price  
4 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
5 throughout Kansas; (2) prices for electrolytic and film capacitors were raised, fixed, maintained and  
6 stabilized at artificially high levels throughout Kansas; (3) Kansas Plaintiff and the Kansas  
7 Damages Class were deprived of free and open competition; and (4) Kansas Plaintiff and the  
8 Kansas Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film  
9 capacitors and/or electronic products containing electrolytic and film capacitors.

10          b. During the respective Class Periods, defendants' illegal conduct substantially  
11 affected Kansas commerce.

12          c. As a direct and proximate result of defendants' unlawful conduct, Kansas Plaintiff  
13 and the Kansas Damages Class have been injured in their business and property and are threatened  
14 with further injury.

15          d. By reason of the foregoing, defendants have entered into agreements in restraint of  
16 trade in violation of Kansas Statutes §§ 50-101, *et seq.* Accordingly, Kansas Plaintiff and the  
17 Kansas Damages Class seek all forms of relief available under Kansas Statutes §§ 50-101, *et seq.*

18           386. Maine: By reason of the foregoing, defendants have violated the Maine Revised  
19 Statutes, 10 M.R.S. §§ 1101, *et seq.* Maine Plaintiff on behalf of the Maine Damages Class alleges  
20 as follows:

21          a. Defendants' combination or conspiracy had the following effects: (1) price  
22 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
23 throughout Maine; (2) prices for electrolytic and film capacitors were raised, fixed, maintained and  
24 stabilized at artificially high levels throughout Maine; (3) Maine Plaintiff and the Maine Damages  
25 Class were deprived of free and open competition; and (4) Maine Plaintiff and the Maine Damages  
26 Class paid supra-competitive, artificially inflated prices for electrolytic and film capacitors and/or  
27 electronic products containing electrolytic and film capacitors.

1           b.       During the respective Class Periods, defendants' illegal conduct substantially  
2 affected Maine commerce.

3           c.       As a direct and proximate result of defendants' unlawful conduct, Maine Plaintiff  
4 and the Maine Damages Class have been injured in their business and property and are threatened  
5 with further injury.

6           d.       By reason of the foregoing, defendants have entered into agreements in restraint of  
7 trade in violation of Maine Revised Statutes 10, §§ 1101, *et seq.* Accordingly, Maine Plaintiff and  
8 the Maine Damages Class seek all relief available under Maine Revised Statutes 10, §§ 1101, *et*  
9 *seq.*

10           387.   Michigan: By reason of the foregoing, defendants have violated Michigan Compiled  
11 Laws §§ 445.773, *et seq.* Michigan Plaintiff on behalf of the Michigan Damages Class alleges as  
12 follows:

13           a.       Defendants' combination or conspiracy had the following effects: (1) price  
14 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
15 throughout Michigan; (2) prices for electrolytic and film capacitors were raised, fixed, maintained  
16 and stabilized at artificially high levels throughout Michigan; (3) Michigan Plaintiff and the  
17 Michigan Damages Class were deprived of free and open competition; and (4) Michigan Plaintiff  
18 and the Michigan Damages Class paid supra-competitive, artificially inflated prices for electrolytic  
19 and film capacitors and/or electronic products containing electrolytic and film capacitors.

20           b.       During the respective Class Periods, defendants' illegal conduct substantially  
21 affected Michigan commerce.

22           c.       As a direct and proximate result of defendants' unlawful conduct, Michigan Plaintiff  
23 and the Michigan Damages Class have been injured in their business and property and are  
24 threatened with further injury.

25           d.       By reason of the foregoing, defendants have entered into agreements in restraint of  
26 trade in violation of Michigan Compiled Laws §§ 445.773, *et seq.* Accordingly, Michigan Plaintiff  
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1 and the Michigan Damages Class seek all relief available under Michigan Compiled Laws §§  
2 445.73, *et seq.*

3 388. Minnesota: By reason of the foregoing, defendants have violated Minnesota Statutes  
4 §§ 325D.49, *et seq.* Minnesota Plaintiff on behalf of the Minnesota Damages Class alleges as  
5 follows:

6 a. Defendants' combination or conspiracy had the following effects: (1) price  
7 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
8 throughout Minnesota; (2) prices for electrolytic and film capacitors were raised, fixed, maintained  
9 and stabilized at artificially high levels throughout Minnesota; (3) Minnesota Plaintiff and the  
10 Minnesota Damages Class were deprived of free and open competition; and (4) Minnesota Plaintiff  
11 and the Minnesota Damages Class paid supra-competitive, artificially inflated prices for electrolytic  
12 and film capacitors and/or electronic products containing electrolytic and film capacitors.

13 b. During the respective Class Periods, defendants' illegal conduct substantially affected  
14 Minnesota commerce.

15 c. As a direct and proximate result of defendants' unlawful conduct, Minnesota Plaintiff  
16 and the Minnesota Damages Class have been injured in their business and property and are  
17 threatened with further injury.

18 d. By reason of the foregoing, defendants have entered into agreements in restraint of trade  
19 in violation of Minnesota Statutes §§ 325D.49, *et seq.* Accordingly, Minnesota Plaintiff and the  
20 Minnesota Damages Class seek all relief available under Minnesota Statutes §§ 325D.49, *et seq.*

21 389. Mississippi: By reason of the foregoing, defendants have violated Mississippi Code  
22 §§ 75-21-1, *et seq.* Mississippi Plaintiff on behalf of the Mississippi Damages Class alleges as  
23 follows:

24 a. Defendants' combination or conspiracy had the following effects: (1) price  
25 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
26 throughout Mississippi; (2) prices for electrolytic and film capacitors were raised, fixed, maintained  
27 and stabilized at artificially high levels throughout Mississippi; (3) Mississippi Plaintiff and the



Mississippi Damages Class were deprived of free and open competition; and (4) Mississippi Plaintiff and the Mississippi Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors.

b. During the respective Class Periods, defendants' illegal conduct substantially affected Mississippi commerce.

c. As a direct and proximate result of defendants' unlawful conduct, Mississippi Plaintiff and the Mississippi Damages Class have been injured in their business and property and are threatened with further injury.

d. By reason of the foregoing, defendants have entered into agreements in restraint of trade in violation of Mississippi Code §§ 75-21-1, *et seq.*

e. Accordingly, Mississippi Plaintiff and the Mississippi Damages Class seek all relief available under Mississippi Code § 75-21-1, *et seq.*

390. Nebraska: By reason of the foregoing, defendants have violated Nebraska Revised Statutes §§ 59-801, *et seq.* Nebraska Plaintiff on behalf of the Nebraska Damages Class alleges as follows:

a. Defendants' combination or conspiracy had the following effects: (1) price competition for electrolytic and film capacitors was restrained, suppressed, and eliminated throughout Nebraska; (2) prices for electrolytic and film capacitors were raised, fixed, maintained and stabilized at artificially high levels throughout Nebraska; (3) Nebraska Plaintiff and the Nebraska Damages Class were deprived of free and open competition; and (4) Nebraska Plaintiff and the Nebraska Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors.

b. During the respective Class Periods, defendants' illegal conduct substantially affected Nebraska commerce.

1 c. As a direct and proximate result of defendants' unlawful conduct, Nebraska Plaintiff  
2 and the Nebraska Damages Class have been injured in their business and property and are  
3 threatened with further injury.

4 d. By reason of the foregoing, defendants have entered into agreements in restraint of  
5 trade in violation Nebraska Revised Statutes §§ 59-801, *et seq.* Accordingly, Nebraska Plaintiff  
6 and the Nebraska Damages Class seek all relief available under Nebraska Revised Statutes §§ 59-  
7 801, *et seq.*

8 391. Nevada: By reason of the foregoing, defendants have violated Nevada Revised  
9 Statutes §§ 598A.010, *et seq.* Nevada Plaintiff on behalf of the Nevada Damages Class alleges as  
10 follows:

11 a. Defendants' combination or conspiracy had the following effects: (1) price  
12 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
13 throughout Nevada; (2) prices for electrolytic and film capacitors were raised, fixed, maintained and  
14 stabilized at artificially high levels throughout Nevada; (3) Nevada Plaintiff and the Nevada  
15 Damages Class were deprived of free and open competition; and (4) Nevada Plaintiff and the  
16 Nevada Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film  
17 capacitors and/or electronic products containing electrolytic and film capacitors.

18 b. During the respective Class Periods, defendants' illegal conduct substantially  
19 affected Nevada commerce.

20 c. As a direct and proximate result of defendants' unlawful conduct, Nevada Plaintiff  
21 and the Nevada Damages Class have been injured in their business and property and are threatened  
22 with further injury.

23 d. By reason of the foregoing, defendants have entered into agreements in restraint of  
24 trade in violation of Nevada Revised Statutes §§ 598A.010, *et seq.* Accordingly, Nevada Plaintiff  
25 and the Nevada Damages Class seek all relief available under Nevada Revised Statutes §§  
26 598A.010, *et seq.*

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1           392. New Mexico: By reason of the foregoing, defendants have violated New Mexico  
2 Statutes §§ 57-1-1, *et seq.* New Mexico Plaintiff on behalf of the New Mexico Damages Class  
3 alleges as follows:

4           a. Defendants' combination or conspiracy had the following effects: (1) price  
5 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
6 throughout New Mexico; (2) prices for electrolytic and film capacitors were raised, fixed,  
7 maintained and stabilized at artificially high levels throughout New Mexico; (3) New Mexico  
8 Plaintiff and the New Mexico Damages Class were deprived of free and open competition; and (4)  
9 New Mexico Plaintiff and the New Mexico Damages Class paid supra-competitive, artificially  
10 inflated prices for electrolytic and film capacitors and/or electronic products containing electrolytic  
11 and film capacitors.

12           b. During the respective Class Periods, defendants' illegal conduct substantially  
13 affected New Mexico commerce.

14           c. As a direct and proximate result of defendants' unlawful conduct, New Mexico  
15 Plaintiff and the New Mexico Damages Class have been injured in their business and property and  
16 are threatened with further injury.

17           d. By reason of the foregoing, defendants have entered into agreements in restraint of  
18 trade in violation of New Mexico Statutes §§ 57-1-1, *et seq.* Accordingly, New Mexico Plaintiff  
19 and the New Mexico Damages Class seek all relief available under New Mexico Statutes §§ 57-1-1,  
20 *et seq.*

21           393. New York: By reason of the foregoing, defendants have violated New York General  
22 Business Laws §§ 340, *et seq.* New York Plaintiff on behalf of the New York Damages Class  
23 alleges as follows:

24           a. Defendants' combination or conspiracy had the following effects: (1) price  
25 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
26 throughout New York; (2) prices for electrolytic and film capacitors were raised, fixed, maintained  
27 and stabilized at artificially high levels throughout New York; (3) New York Plaintiff and the New

1 York Damages Class were deprived of free and open competition; and (4) New York Plaintiff and  
2 the New York Damages Class paid supra-competitive, artificially inflated prices for electrolytic and  
3 film capacitors and/or electronic products containing electrolytic and film capacitors.

4 b. During the respective Class Periods, defendants' illegal conduct substantially  
5 affected New York commerce.

6 c. As a direct and proximate result of defendants' unlawful conduct, New York  
7 Plaintiff and the New York Damages Class have been injured in their business and property and are  
8 threatened with further injury.

9 d. By reason of the foregoing, defendants have entered into agreements in restraint of  
10 trade in violation of New York General Business Laws §§ 340, *et seq.* Accordingly, New York  
11 Plaintiff and the New York Damages Class seek all relief available under New York General  
12 Business Laws §§ 340, *et seq.*

13 394. North Carolina: By reason of the foregoing, defendants have violated North Carolina  
14 General Statutes §§ 75-1, *et seq.* North Carolina Plaintiff on behalf of the North Carolina Damages  
15 Class alleges as follows:

16 a. Defendants' combination or conspiracy had the following effects: (1) price  
17 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
18 throughout North Carolina; (2) prices for electrolytic and film capacitors were raised, fixed,  
19 maintained and stabilized at artificially high levels throughout North Carolina; (3) North Carolina  
20 Plaintiff and the North Carolina Damages Class were deprived of free and open competition; and  
21 (4) North Carolina Plaintiff and the North Carolina Damages Class paid supra-competitive,  
22 artificially inflated prices for electrolytic and film capacitors and/or electronic products containing  
23 electrolytic and film capacitors.

24 b. During the respective Class Periods, defendants' illegal conduct substantially  
25 affected North Carolina commerce.

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1 c. As a direct and proximate result of defendants' unlawful conduct, North Carolina  
2 Plaintiff and the North Carolina Damages Class have been injured in their business and property  
3 and are threatened with further injury.

4 d. By reason of the foregoing, defendants have entered into agreements in restraint of  
5 trade in violation of North Carolina General Statutes §§ 75-1, *et seq.* Accordingly, North Carolina  
6 Plaintiff and the North Carolina Damages Class seek all relief available under North Carolina  
7 General Statutes §§ 75-1, *et seq.*

8 395. North Dakota: By reason of the foregoing, defendants have violated North Dakota  
9 Century Code §§ 51-08.1-01, *et seq.* North Dakota Plaintiff on behalf of the North Dakota  
10 Damages Class alleges as follows:

11 a. Defendants' combination or conspiracy had the following effects: (1) price competition  
12 for electrolytic and film capacitors was restrained, suppressed, and eliminated throughout North  
13 Dakota; (2) prices for electrolytic and film capacitors were raised, fixed, maintained and stabilized  
14 at artificially high levels throughout North Dakota; (3) North Dakota Plaintiff and the North Dakota  
15 Damages Class were deprived of free and open competition; and (4) North Dakota Plaintiff and the  
16 North Dakota Damages Class paid supra-competitive, artificially inflated prices for electrolytic and  
17 film capacitors and/or electronic products containing electrolytic and film capacitors.

18 b. During the respective Class Periods, defendants' illegal conduct had a substantial effect  
19 on North Dakota commerce.

20 c. As a direct and proximate result of defendants' unlawful conduct, North Dakota Plaintiff  
21 and the North Dakota Damages Class have been injured in their business and property and are  
22 threatened with further injury.

23 d. By reason of the foregoing, defendants have entered into agreements in restraint of trade  
24 in violation of North Dakota Century Code §§ 51-08.1-01, *et seq.* Accordingly, North Dakota  
25 Plaintiff and the North Dakota Damages Class seek all relief available under North Dakota Century  
26 Code §§ 51-08.1-01, *et seq.*

1           396. Oregon: By reason of the foregoing, defendants have violated Oregon Revised  
2 Statutes §§ 646.705, *et seq.* Oregon Plaintiffs on behalf of the Oregon Damages Class allege as  
3 follows:

4           a. Defendants' combination or conspiracy had the following effects: (1) price  
5 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
6 throughout Oregon; (2) prices for electrolytic and film capacitors were raised, fixed, maintained and  
7 stabilized at artificially high levels throughout Oregon; (3) Oregon Plaintiffs and the Oregon  
8 Damages Class were deprived of free and open competition; and (4) Oregon Plaintiffs and the  
9 Oregon Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film  
10 capacitors and/or electronic products containing electrolytic and film capacitors.

11           b. During the respective Class Periods, defendants' illegal conduct had a substantial  
12 effect on Oregon commerce.

13           c. As a direct and proximate result of defendants' unlawful conduct, Oregon Plaintiffs  
14 and the Oregon Damages Class have been injured in their business and property and are threatened  
15 with further injury.

16           d. By reason of the foregoing, defendants have entered into agreements in restraint of  
17 trade in violation of Oregon Revised Statutes §§ 646.705, *et seq.* Accordingly, Oregon Plaintiffs  
18 and the Oregon Damages Class seek all relief available under Oregon Revised Statutes §§ 646.705,  
19 *et seq.*

20           397. South Dakota: By reason of the foregoing, defendants have entered into an  
21 unlawful agreement in restraint of trade in violation of the South Dakota Codified Laws §§ 37-1-  
22 3.1, *et seq.* South Dakota Plaintiff on behalf of the South Dakota Damages Classes alleges as  
23 follows:

24           a. Defendants' combination or conspiracy had the following effects: (1) price  
25 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
26 throughout South Dakota; (2) prices for electrolytic and film capacitors were raised, fixed,  
27 maintained and stabilized at artificially high levels throughout South Dakota; (3) South

1 Dakota Plaintiff and members of the South Dakota Damages Class were deprived of free  
2 and open competition; and (4) South Dakota Plaintiff and members of the South Dakota  
3 Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film  
4 capacitors and/or electronic products containing electrolytic and film capacitors.

5 b. During the respective Class Periods, defendants' illegal conduct substantially  
6 affected South Dakota commerce.

7 c. As a direct and proximate result of defendants' unlawful conduct, South Dakota  
8 Plaintiff and members of the South Dakota Damages Class have been injured in their  
9 business and property and are threatened with further injury.

10 d. By reason of the foregoing, defendants entered into agreements in restraint of trade  
11 in violation of South Dakota Revised Statutes §§ 44-1401, *et seq.* Accordingly, South  
12 Dakota Plaintiff and the members of the South Dakota Damages Class seek all forms of  
13 relief available under South Dakota Codified Laws §§ 37-1-3.1, *et seq.*

14 398. Tennessee: By reason of the foregoing, defendants have violated Tennessee Code §§  
15 47-25-101, *et seq.* Tennessee Plaintiff on behalf of the Tennessee Damages Class alleges as  
16 follows:

17 a. Defendants' combination or conspiracy had the following effects: (1) price competition  
18 for electrolytic and film capacitors was restrained, suppressed, and eliminated throughout  
19 Tennessee; (2) prices for electrolytic and film capacitors were raised, fixed, maintained and  
20 stabilized at artificially high levels throughout Tennessee; (3) Tennessee Plaintiff and the Tennessee  
21 Damages Class were deprived of free and open competition; and (4) Tennessee Plaintiff and the  
22 Tennessee Damages Class paid supra-competitive, artificially inflated prices for electrolytic and  
23 film capacitors and/or electronic products containing electrolytic and film capacitors.

24 b. During the respective Class Periods, defendants' illegal conduct had a substantial effect  
25 on Tennessee commerce as products containing electrolytic and film capacitors were sold in  
26 Tennessee.

1 c. As a direct and proximate result of defendants' unlawful conduct, Tennessee Plaintiff  
2 and the Tennessee Damages Class have been injured in their business and property and are  
3 threatened with further injury.

4 d. By reason of the foregoing, defendants have entered into agreements in restraint of trade  
5 in violation of Tennessee Code §§ 47-25-101, *et seq.* Accordingly, Tennessee Plaintiff and the  
6 Tennessee Damages Class seek all relief available under Tennessee Code §§ 47-25-101, *et seq.*

7 399. Vermont: By reason of the foregoing, defendants have violated Vermont Stat. Ann. 9  
8 §§ 2453, *et seq.* Vermont Plaintiff on behalf of the Vermont Damages Class alleges as follows:

9 a. Defendants' combination or conspiracy had the following effects: (1) price  
10 competition for electrolytic and film capacitors was restrained, suppressed, and eliminated  
11 throughout Vermont; (2) prices for electrolytic and film capacitors were raised, fixed, maintained  
12 and stabilized at artificially high levels throughout Vermont; (3) Vermont Plaintiff and the Vermont  
13 Damages Class were deprived of free and open competition; and (4) Vermont Plaintiff and the  
14 Vermont Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film  
15 capacitors and/or electronic products containing electrolytic and film capacitors.

16 b. During the respective Class Periods, defendants' illegal conduct had a substantial  
17 effect on Vermont commerce.

18 c. As a direct and proximate result of defendants' unlawful conduct, Vermont Plaintiff  
19 and the Vermont Damages Class have been injured in their business and property and are  
20 threatened with further injury.

21 d. By reason of the foregoing, defendants have entered into agreements in restraint of  
22 trade in violation of Vermont Stat. Ann. 9 §§ 2453, *et seq.* Accordingly, Vermont Plaintiff and the  
23 Vermont Damages Class seek all relief available under Vermont Stat. Ann. 9 §§ 2453, *et seq.*

24 400. West Virginia: By reason of the foregoing, defendants have violated West Virginia  
25 Code §§ 47-18-1, *et seq.* West Virginia Plaintiff on behalf of the West Virginia Damages Class  
26 alleges as follows:  
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a. Defendants' combination or conspiracy had the following effects: (1) price competition for electrolytic and film capacitors was restrained, suppressed, and eliminated throughout West Virginia; (2) prices for electrolytic and film capacitors were raised, fixed, maintained and stabilized at artificially high levels throughout West Virginia; (3) West Virginia Plaintiff and the West Virginia Damages Class were deprived of free and open competition; and (4) West Virginia Plaintiff and the West Virginia Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors.

b. During the respective Class Periods, defendants' illegal conduct had a substantial effect on West Virginia commerce.

c. As a direct and proximate result of defendants' unlawful conduct, West Virginia Plaintiff and the West Virginia Damages Class have been injured in their business and property and are threatened with further injury.

d. By reason of the foregoing, defendants have entered into agreements in restraint of trade in violation of West Virginia Code §§ 47-18-1, *et seq.* Accordingly, West Virginia Plaintiff and the West Virginia Damages Class seek all relief available under West Virginia Code §§ 47-18-1, *et seq.*

**FIFTH CLAIM FOR RELIEF**  
**(Violation of State Consumer Protection and Unfair Competition Laws)**  
**(On Behalf of All Plaintiffs Against All Defendants)**

401. Plaintiffs incorporate by reference the allegations in the above paragraphs as if fully set forth herein.

402. In the event that the Court does not apply California law on a nationwide basis, Plaintiffs allege the following violations of state consumer protection and unfair competition laws in the alternative.

403. Defendants engaged in unfair competition or unfair, unconscionable, deceptive or fraudulent acts or practices in violation of the state consumer protection and unfair competition statutes listed below.

1           404. Arkansas: By reason of the foregoing, defendants have violated the Arkansas  
2 Deceptive Trades Practices Act, AR ST §4-88-101 *et seq.*, Arkansas Plaintiff on behalf of the  
3 Arkansas Damages Class alleges as follows:

4           a. Defendants' unlawful conduct had the following effects: (1) price competition  
5 for electrolytic and film capacitors and/or electronic products containing electrolytic and film  
6 capacitors was restrained, suppressed, and eliminated throughout Arkansas; (2) prices for  
7 electrolytic and film capacitors and/or electronic products containing electrolytic and film  
8 capacitors were raised, fixed, maintained, and stabilized at artificially high levels throughout  
9 Arkansas; (3) Arkansas Plaintiff and the Arkansas Damages Class were deprived of free and open  
10 competition; and (4) Arkansas Plaintiff and the Arkansas Damages Class paid supra-competitive,  
11 artificially inflated prices for electrolytic and film capacitors and/or electronic products containing  
12 electrolytic and film capacitors.

13           b. During the respective Class Periods, defendants' illegal conduct substantially  
14 affected Arkansas a commerce and consumers.

15           c. As a direct and proximate result of defendants' unlawful conduct, Arkansas  
16 Plaintiff and Arkansas Damages Class have been injured and are threatened with further injury.

17           d. Defendants have engaged in unfair competition or unconscionable, unfair or  
18 deceptive acts or practices in violation of AR ST §4-88-101 *et seq.*, and, accordingly, Arkansas  
19 Plaintiff and the Arkansas Damages Class seek all relief available under that statute.

20           405. California: By reason of the foregoing, defendants have violated California's Unfair  
21 Competition Law, Cal. Bus. & Prof. Code §§ 17200, *et seq.* California Plaintiffs on behalf of the  
22 California Damages Class alleges as follows:

23           a. Defendants committed acts of unfair competition, as defined by section 17200, *et*  
24 *seq.*, by engaging in a conspiracy to fix and stabilize the price of electrolytic and film capacitors as  
25 described above.

26           b. The acts, omissions, misrepresentations, practices and non-disclosures of defendants,  
27 as described above, constitute a common and continuing course of conduct of unfair competition by

1 means of unfair, unlawful and/or fraudulent business acts or practices with the meaning of section  
2 17200, *et seq.*, including, but not limited to (1) violation of Section 1 of the Sherman Act; (2)  
3 violation of the Cartwright Act.

4 c. Defendants' acts, omissions, misrepresentations, practices and nondisclosures are  
5 unfair, unconscionable, unlawful and/or fraudulent independently of whether they constitute a  
6 violation of the Sherman Act or the Cartwright Act.

7 d. Defendants' acts or practices are fraudulent or deceptive within the meaning of  
8 section 17200, *et seq.*

9 e. Defendants' conduct was carried out, effectuated, and perfected within the State of  
10 California. Defendants maintained offices in California where their employees engaged in  
11 communications, meetings and other activities in furtherance of defendants' conspiracy.

12 f. By reason of the foregoing, California Plaintiffs and the California Damages Class  
13 are entitled to full restitution and/or disgorgement of all revenues, earnings, profits, compensation,  
14 and benefits that may have been obtained by defendants as result of such business acts and practices  
15 described above.

16 406. Florida: By reason of the foregoing, defendants have violated the Florida Deceptive  
17 and Unfair Trade Practices Act, Fla. Stat. §§ 501.201, *et seq.* Florida Plaintiff on behalf of the  
18 Florida Damages Class alleges as follows:

19 a. Defendants' unlawful conduct had the following effects: (1) price competition for  
20 electrolytic and film capacitors and/or electronic products containing electrolytic and film  
21 capacitors was restrained, suppressed, and eliminated throughout Florida; (2) prices for electrolytic  
22 and film capacitors and/or electronic products containing electrolytic and film capacitors were  
23 raised, fixed, maintained, and stabilized at artificially high levels throughout Florida; (3) Florida  
24 Plaintiff and the Florida Damages Class were deprived of free and open competition; and (4)  
25 Florida Plaintiff and the Florida Damages Class paid supra-competitive, artificially inflated prices  
26 for electrolytic and film capacitors and/or electronic products containing electrolytic and film  
27 capacitors.

1           b.       During the respective Class Periods, defendants' illegal conduct substantially  
2 affected Florida commerce and consumers.

3           c.       As a direct and proximate result of defendants' unlawful conduct, Florida Plaintiff  
4 and the Florida Damages Class have been injured and are threatened with further injury.

5           d.       Defendants have engaged in unfair competition or unfair or deceptive acts or  
6 practices in violation of Fla. Stat. §§ 501.201, *et seq.*, and, accordingly, Florida Plaintiff and the  
7 Florida Damages Class seek all relief available under that statute.

8           407. Missouri: By reason of the foregoing, defendants have violated Missouri's  
9 Merchandising Practices Act, specifically Mo. Rev. Stat. § 407.020. Missouri Plaintiff on behalf  
10 of the Missouri Damages Class alleges as follows:

11           a.       Missouri Plaintiff and members of the Missouri Damages Class purchased  
12 electrolytic and film capacitors for personal, family, or household purposes.

13           b.       Defendants engaged in the conduct described herein in connection with the sale of  
14 electrolytic and film capacitors and/or electronic products containing electrolytic and film  
15 capacitors in trade or commerce in a market that includes Missouri.

16           c.       Defendants agreed to, and did in fact affect, fix, control, and/or maintain, at artificial  
17 and non-competitive levels, the prices at which electrolytic and film capacitors and/or electronic  
18 products containing electrolytic and film capacitors were sold, distributed, or obtained in Missouri,  
19 which conduct constituted unfair practices in that it was unlawful under federal and state law,  
20 violated public policy, was unethical, oppressive and unscrupulous, and caused substantial injury to  
21 Missouri Plaintiff and the members of the Missouri Damages Class.

22           d.       Defendants concealed, suppressed, and omitted to disclose material facts to Missouri  
23 Plaintiff and the members of the Missouri Damages Class concerning defendants' unlawful  
24 activities and artificially inflated prices for electrolytic and film capacitors and/or electronic  
25 products containing electrolytic and film capacitors. The concealed, suppressed, and omitted facts  
26 would have been important to Missouri Plaintiff and the members of the Missouri Damages Class  
27  
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1 as they related to the cost of electrolytic and film capacitors and/or electronic products containing  
2 electrolytic and film capacitors that they purchased.

3 e. Defendants misrepresented the real cause of price increases and/or the absence of  
4 price reductions in electrolytic and film capacitors and/or electronic products containing electrolytic  
5 and film capacitors by making public statements that were not in accord with the facts.

6 f. Defendants' statements and conduct concerning the price of electrolytic and film  
7 capacitors and/or electronic products containing electrolytic and film capacitors were deceptive as  
8 they had the tendency or capacity to mislead Missouri Plaintiff and the members of the Missouri  
9 Damages Class to believe that they were purchasing electrolytic and film capacitors and/or  
10 electronic products containing electrolytic and film capacitors at prices established by a free and  
11 fair market. Defendants' unlawful conduct had the following effects: (1) Capacitor and Capacitor  
12 Products price competition was restrained, suppressed, and eliminated throughout Missouri; (2)  
13 electrolytic and film capacitors and/or electronic products containing electrolytic and film  
14 capacitors prices were raised, fixed, maintained, and stabilized at artificially high levels throughout  
15 Missouri; (3) Missouri Plaintiff and members of the Missouri Damages Class were deprived of free  
16 and open competition; and (4) Missouri Plaintiff and members of the Missouri Damages Class paid  
17 supra-competitive, artificially inflated prices for electrolytic and film capacitors and/or electronic  
18 products containing electrolytic and film capacitors.

19 g. The foregoing acts and practices constituted unlawful practices in violation of the  
20 Missouri Merchandising Practices Act.

21 h. As a direct and proximate result of the above-described unlawful practices, Missouri  
22 Plaintiff and members of the Missouri Damages Class suffered ascertainable loss of money or  
23 property.

24 i. Accordingly, Missouri Plaintiff and members of the Missouri Damages Class seek  
25 all relief available under Missouri's Merchandising Practices Act, specifically Mo. Rev. Stat. §  
26 407.020, which prohibits "the act, use or employment by any person of any deception, fraud, false  
27 pretense, false promise, misrepresentation, unfair practice or the concealment, suppression, or

omission of any material fact in connection with the sale or advertisement of any merchandise in trade or commerce,” as further interpreted by the Missouri Code of State Regulations, 15 CSR 60-7.010, *et seq.*, 15 CSR 60-8.010, *et seq.*, and 15 CSR 60-9.010, *et seq.*, and Mo. Rev. Stat. § 407.025, which provides for the relief sought in this count.

408. Nebraska: By reason of the foregoing, defendants have violated Nebraska’s Consumer Protection Act, Neb. Rev. Stat. §§ 59-1601, *et seq.* Nebraska Plaintiff on behalf of the Nebraska Damages Class alleges as follows:

a. Defendants’ unlawful conduct had the following effects: (1) electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors price competition was restrained, suppressed, and eliminated throughout Nebraska; (2) electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors prices were raised, fixed, maintained, and stabilized at artificially high levels throughout Nebraska; (3) Nebraska Plaintiff and the Nebraska Damages Class were deprived of free and open competition; and (4) Nebraska Plaintiff and the Nebraska Damages Class paid supra-competitive, artificially inflated prices for electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors.

b. During the respective Class Periods, defendants’ illegal conduct substantially affected Nebraska commerce and consumers.

c. As a direct and proximate result of defendants’ unlawful conduct, Nebraska Plaintiff and the Nebraska Damages Class have been injured and are threatened with further injury.

d. Defendants’ actions and conspiracy have had a substantial impact on the public interests of Nebraska and its residents.

e. Defendants have engaged in unfair competition or unfair or deceptive acts or practices in violation of Nebraska’s Consumer Protection Act, Neb. Rev. Stat. §§ 59-1601, *et seq.* and, accordingly, Nebraska Plaintiff and the Nebraska Damages Class seek all relief available under that statute.

1           409. New Mexico: By reason of the foregoing, defendants have engaged in unfair  
2 competition or unfair, unconscionable, or deceptive acts or practices in violation of the New  
3 Mexico Statutes §§ 57-1-1, *et. seq.* New Mexico Plaintiff on behalf of the New Mexico Damages  
4 Class alleges as follows:

5           (a) Defendants' unlawful conduct had the following effects: (1) electrolytic and film  
6 capacitors and/or electronic products containing electrolytic and film capacitors price competition  
7 was restrained, suppressed, and eliminated throughout New Mexico; (2) electrolytic and film  
8 capacitors prices and/or electronic products containing electrolytic and film capacitors were raised,  
9 fixed, maintained, and stabilized at artificially high levels throughout New Mexico; (3) Plaintiffs  
10 and members of the Damages Class were deprived of free and open competition; and (4) Plaintiffs  
11 and members of the Damages Class paid supracompetitive, artificially inflated prices for  
12 electrolytic and film capacitors and/or electronic products containing electrolytic and film  
13 capacitors.

14           (b) During the respective Class Periods, defendants' illegal conduct substantially  
15 affected New Mexico commerce and customers.

16           (c) As a direct and proximate result of defendants' unlawful conduct, New Mexico  
17 Plaintiff and the New Mexico Damages Class have been injured in their business and property and  
18 are threatened with further injury.

19           (d) By reason of the foregoing, defendants have entered into agreements in restraint of  
20 trade in violation of New Mexico Statutes §§ 57-1-1, *et. seq.* Accordingly, New Mexico Plaintiff  
21 and the New Mexico Damages Class class seek all relief available under New Mexico Statutes §§  
22 57-1-1, *et. seq.*

23           410. New York: By reason of the foregoing, defendants have violated New York's  
24 General Business Law, N.Y. Gen. Bus. Law § 349, *et seq.* New York Plaintiff on behalf of the  
25 New York Damages Class alleges as follows:

26           a. Defendants agreed to, and did in fact, act in restraint of trade or commerce by  
27 affecting, fixing, controlling and/or maintaining, at artificial and noncompetitive levels, the prices at

1 which electrolytic and film capacitors and/or electronic products containing electrolytic and film  
2 capacitors were sold, distributed or obtained in New York and took efforts to conceal their  
3 agreements from New York Plaintiff and the New York Damages Class.

4 b. The conduct of the defendants described herein constitutes consumer-oriented  
5 deceptive acts or practices within the meaning of N.Y. Gen. Bus. Law § 349, which resulted in  
6 consumer injury and broad adverse impact on the public at large, and harmed the public interest of  
7 New York State in an honest marketplace in which economic activity is conducted in a competitive  
8 manner.

9 c. Defendants made certain statements about electrolytic and film capacitors that they  
10 knew would be seen by New York residents and these statements either omitted material  
11 information that rendered the statements they made materially misleading or affirmatively  
12 misrepresented the real cause of price increases for electrolytic and film capacitors and/or electronic  
13 products containing electrolytic and film capacitors.

14 d. Defendants' unlawful conduct had the following effects: (1) electrolytic and film  
15 capacitors and/or electronic products containing electrolytic and film capacitors price competition  
16 was restrained, suppressed, and eliminated throughout New York; (2) electrolytic and film  
17 capacitors and/or electronic products containing electrolytic and film capacitors prices were raised,  
18 fixed, maintained, and stabilized at artificially high levels throughout New York; (3) New York  
19 Plaintiff and the New York Damages Class were deprived of free and open competition; and (4)  
20 New York Plaintiff and the New York Damages Class paid supra-competitive, artificially inflated  
21 prices for electrolytic and film capacitors and/or electronic products containing electrolytic and film  
22 capacitors.

23 e. During the respective Class Periods, defendants' illegal conduct substantially  
24 affected New York commerce and consumers.

25 f. During the respective Class Periods, each of the defendants named herein, directly,  
26 or indirectly and through affiliates they dominated and controlled, manufactured, sold and/or  
27



distributed electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors in New York.

g. New York Plaintiff and the New York Damages Class seek actual damages for their injuries caused by these violations in an amount to be determined at trial and are threatened with further injury. Without prejudice to their contention that defendants' unlawful conduct was willful and knowing, New York Plaintiff and the New York Damages Class do not seek in this action to have those damages trebled pursuant to N.Y. Gen. Bus. Law § 349(h).

411. North Carolina: By reason of the foregoing, defendants have engaged in unfair competition or unfair, unconscionable, or deceptive acts or practices in violation of North Carolina Gen. Stat. §§ 75-1, *et seq.* North Carolina Plaintiff on behalf of the North Carolina Damages Class alleges as follows:

(a) Defendants' unlawful conduct had the following effects: (1) electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors price competition was restrained, suppressed, and eliminated throughout North Carolina; (2) electrolytic and film capacitors prices and/or electronic products containing electrolytic and film capacitors were raised, fixed, maintained, and stabilized at artificially high levels throughout North Carolina; (3) Plaintiffs and members of the Damages Class were deprived of free and open competition; and (4) Plaintiffs and members of the Damages Class paid supracompetitive, artificially inflated prices for electrolytic and film capacitors and/or electronic products containing electrolytic and film capacitors.

(b) During the respective Class Periods, defendants' illegal conduct substantially affected North Carolina commerce and customers.

(c) As a direct and proximate result of defendants' unlawful conduct, North Carolina Plaintiff and the North Carolina Damages Class have been injured in their business and property and are threatened with further injury.

(d) By reason of the foregoing, defendants have entered into agreements in restraint of trade in violation of North Carolina Gen. Stat. §§ 75-1, *et seq.* Accordingly, North Carolina Plaintiff

1 and the North Carolina Damages Class class seek all relief available under North Carolina General  
2 Statutes §§ 75-1, *et seq.*

3 412. Vermont: By reason of the foregoing, defendants have violated Vermont's  
4 Consumer Fraud Act, 9 Vt. Stat. Ann. § 2451, *et seq.* Vermont Plaintiff on behalf of the Vermont  
5 Damages Class alleges as follows:

6 a. Defendants agreed to, and did in fact, act in restraint of trade or commerce in a  
7 market that includes Vermont, by affecting, fixing, controlling, and/or maintaining, at artificial and  
8 noncompetitive levels, the prices at which electrolytic and film capacitors and/or electronic  
9 products containing electrolytic and film capacitors were sold, distributed, or obtained in Vermont.

10 b. Defendants deliberately failed to disclose material facts to Vermont Plaintiff and the  
11 Vermont Damages Class concerning defendants' unlawful activities and artificially inflated prices  
12 for electrolytic and film capacitors and/or electronic products containing electrolytic and film  
13 capacitors. Defendants owed a duty to disclose such facts, and considering the relative lack of  
14 sophistication of the average, non-business consumer, defendants breached that duty by their  
15 silence. Defendants misrepresented to all consumers during the respective Class Periods that  
16 defendants' electrolytic and film capacitors and/or electronic products containing electrolytic and  
17 film capacitors prices were competitive and fair.

18 c. Defendants' unlawful conduct had the following effects: (1) electrolytic and film  
19 capacitors and/or electronic products containing electrolytic and film capacitors price competition  
20 was restrained, suppressed, and eliminated throughout Vermont; (2) electrolytic and film capacitors  
21 and/or electronic products containing electrolytic and film capacitors prices were raised, fixed,  
22 maintained, and stabilized at artificially high levels throughout Vermont; (3) Vermont Plaintiff and  
23 the Vermont Damages Class were deprived of free and open competition; and (4) Vermont Plaintiff  
24 and the Vermont Damages Class paid supra-competitive, artificially inflated prices for electrolytic  
25 and film capacitors and/or electronic products containing electrolytic and film capacitors.

26 d. As a direct and proximate result of the defendants' violations of law, Vermont  
27 Plaintiff and the Vermont Damages Class suffered an ascertainable loss of money or property as a

1 result of defendants' use or employment of unconscionable and deceptive commercial practices as  
2 set forth above. That loss was caused by defendants' willful and deceptive conduct, as described  
3 herein.

4 e. Defendants' deception, including their affirmative misrepresentations and omissions  
5 concerning the price of electrolytic and film capacitors and/or electronic products containing  
6 electrolytic and film capacitors, likely misled all consumers acting reasonably under the  
7 circumstances to believe that they were purchasing electrolytic and film capacitors and/or electronic  
8 products containing electrolytic and film capacitors at prices born by a free and fair market.  
9 Defendants' misleading conduct and unconscionable activities constitutes unfair competition or  
10 unfair or deceptive acts or practices in violation of 9 Vt. Stat. Ann. § 2451, *et seq.*, and,  
11 accordingly, Vermont Plaintiff and the Vermont Damages Class seek all relief available under that  
12 statute.

#### 13 **XIV. REQUEST FOR RELIEF**

14 WHEREFORE, Indirect Purchaser Plaintiffs respectfully request that:

15 1. The Court determine that this action may be maintained as a class action under Rule  
16 23(a), (b)(2), and (b)(3) of the Federal Rules of Civil Procedure, and direct that reasonable notice of  
17 this action, as provided by Rule 23(c)(2) of the Federal Rules of Civil Procedure, be given to each  
18 and every member of the Classes;

19 2. The unlawful conduct, conspiracy or combination alleged herein be adjudged and  
20 decreed:

21 (a) An unreasonable restraint of trade or commerce in violation of Section 1 of  
22 the Sherman Act;

23 (b) A *per se* violation of Section 1 of the Sherman Act;

24 (c) An unlawful combination, trust, agreement, understanding, and/or concert of  
25 action in violation of the state antitrust, unfair competition, and consumer  
26 protection laws as set forth herein; and

27 (d) Acts of unjust enrichment by defendants as set forth herein.

1           3.       Plaintiffs and the members of the Damages Class recover damages, to the maximum  
2 extent allowed under such laws, and that a joint and several judgment in favor of Plaintiffs and the  
3 members of the Damages Class be entered against defendants in an amount to be trebled to the  
4 extent such laws permit;

5           4.       Plaintiffs and the members of the Damages Class recover damages, to the maximum  
6 extent allowed by such laws, in the form of restitution and/or disgorgement of profits unlawfully  
7 gained from them;

8           5.       Defendants, their affiliates, successors, transferees, assignees and other officers,  
9 directors, partners, agents and employees thereof, and all other persons acting or claiming to act on  
10 their behalf or in concert with them, be permanently enjoined and restrained from in any manner  
11 continuing, maintaining or renewing the conduct, conspiracy, or combination alleged herein, or  
12 from entering into any other conspiracy or combination having a similar purpose or effect, and from  
13 adopting or following any practice, plan, program, or device having a similar purpose or effect;

14           6.       Plaintiffs and the members of the Damages Class be awarded restitution, including  
15 disgorgement of profits defendants obtained as a result of their acts of unfair competition and acts  
16 of unjust enrichment;

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7. Plaintiffs and the members of the Classes recover their costs of suit, including reasonable attorneys' fees, as provided by law; and

8. Plaintiffs and the members of the Classes have such other and further relief as the case may require and the Court may deem just and proper.

Dated: December 4, 2014      Respectfully submitted,

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